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Chris Miller photo

The Croquet Open

Organizers Norm Young (left) and Norm Watt debate the rules of croquet in preparation for the Homecoming Open Costume Croquet Championship on Sunday, Oct. 3. Everyone is welcome to participate in what they hope will be the world's largest "backyard" croquet tournament. Details and registration forms are available at the UBC Alumni, 822-3313. A full program of Homecoming '93 events (Sept. 30 - Oct. 3), including the special public events and attractions scheduled for Saturday, Oct. 2, will be published in the Sept. 30 issue of UBC Reports.

Delving into literacy an education priority

by Charles Ker

Staff writer

Literacy, as a critical, ongoing issue in today's society, is among the research priorities at UBC's Faculty of Education.

Over the years, faculty members have been awarded grants from a variety of public and private institutions to study areas such as the sociology of literacy, policies affecting adult literacy and the use of computers in developing literacy.

Specific research interests have included examinations of literacy among First Nations adults, second language learners and children whose culture has an oral tradition.

Projects described on pages 4 and 5 of this issue of UBC Reports touch on only a fraction of the literacy studies taking place on campus. They also represent only one notion of literacy, namely, the ability to read and write in a first language.

Literacy is often considered in the

A look at literacy See stories pages 4 & 5

broader context of having a basic understanding in many areas touching culture, technology, multimedia, mathematics and science.

"In a province characterized by tremendous ethnic and language diversity, and a country concerned about its competitiveness in a global economy, the interrelationships between these aspects of literacy and their importance cannot be overstated," said Dean of Education Nancy Sheehan.

Research studies introduced in this issue include the continuum of early childhood to adult literacy. In their diverse approaches, they each illustrate the fact that there are many dimensions to the topic, all of which need careful consideration.

New centre tackles employment issues

by Abe Heffer

Staff writer

The employment challenges facing British Columbia and the rest of Canada will be the focus of the new Centre for Labour and Management Studies at UBC.

Housed in the Faculty of Commerce and Business Administration, the centre, which opens Sept. 24, will undertake theoretical and applied research on issues related to work, employment and productivity and their relationship to global competitiveness.

"As global competition increases, concerns about the confrontational nature of union-management relations, stagnant productivity and uncompetitive labour cost structures have also increased," explained Tom Knight, director of the centre and a professor in the Commerce faculty.

"As a result, there exists a strong need for innovation and adaptation in our labour force and employment practices.

"The centre will help focus efforts on employment innovation and channel these efforts to foster corporate competitiveness as well as to enhance workers' financial, occupational and personal lives."

Knight credits Rudy North, a UBC graduate and a principal with investment management consultants Phillips, Hager and North Ltd., for playing a catalytic role in the creation of the centre.

"His keen interest in business ethics and employee relations led to the development of the centre," said Knight.

The centre will address employment challenges in the areas of labour and management relations, human resource management and organizational creativity and innovation.

"The challenge is to help generate improvements in the labour relations climate between management and labour and make it less confrontational," said Knight.

Drawing on research expertise from academic, management, labour and government communities, the centre is currently involved in several projects.

A study is under way to assess the role

of line managers in the public and private sectors and their day-to-day relationships with employees in the bargaining unit and union representatives.

In addition, the centre is working with the British Columbia Government and Service Employees Union to document the union's internal grievance appeal process: how it works, its benefits to employees, and how other unions can employ a similar process.

"We're talking about tackling and resolving real problems in the workplace," said Knight.

"In addition, we are currently working with the B.C. Labour Relations Board to set up expanded databases to provide better policy assessment of the labour relations code."

The centre will engage in a variety of publications, conferences, workshops, internships, exchanges and curriculum innovation.

UBC's contribution to the centre's

advisory board includes Dean Michael Goldberg and Prof. David McPhillips from the Faculty of Commerce. They are joined by 13 other members of the public and private sector, including Kate Braid, director of labour studies at Simon Fraser University; Stan Lanyon, chair of the B.C. Labour Relations Board; Mary

Rowles, director of research and legislation at the B.C. Federation of Labour; and Duncan Wilkins, vice-president of human resources at the Business Council of B.C.

Research associates will be drawn from several areas from within UBC and SFU, as well as the community at large, including the faculties of Commerce and Law, the departments of Economics, Psychology and Sociology, and the Centre for Applied Ethics.

The centre's first conference will bring together labour, management, academic and governmental participants in labour relations March 21-22 to discuss New Departures in Union-Management Relations. The conference will look at ways of improving the relationships between unions and management and offer alternative approaches to collective bargaining.

"The challenge is to help generate improvements in the labour relations climate between management and labour and make it less confrontational."

- Tom Knight

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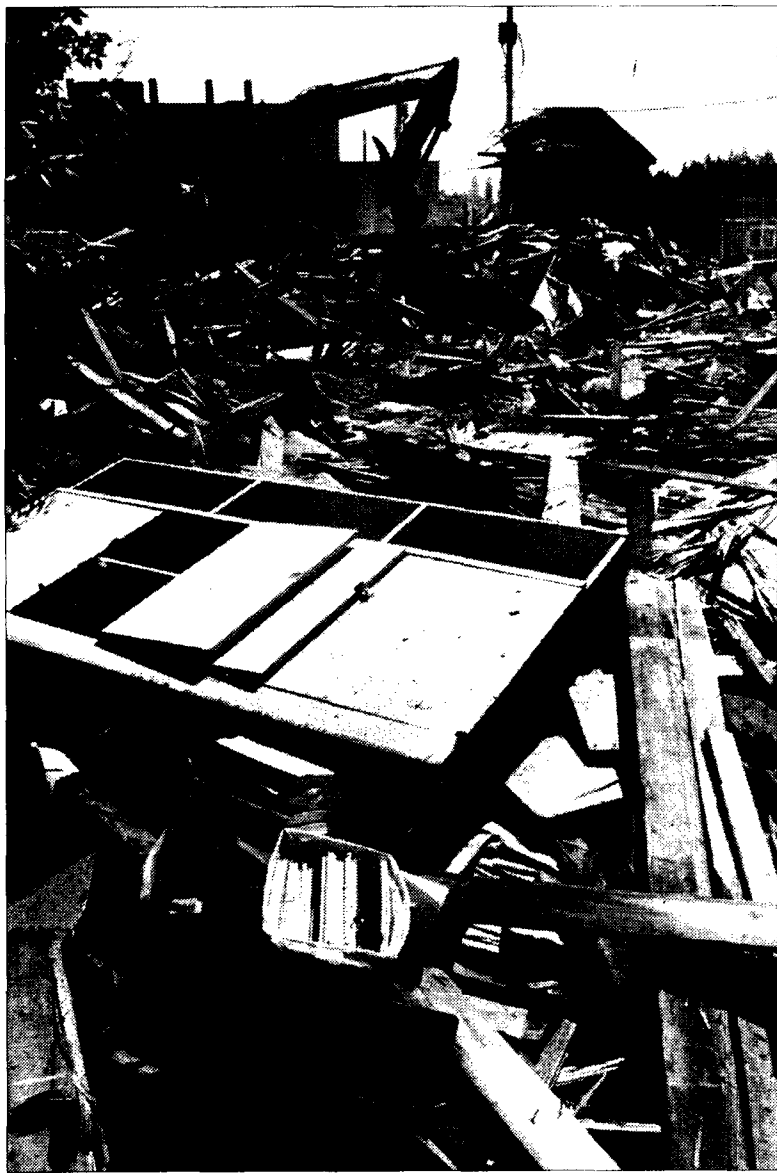
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Gravin Wilson photo

Deconstruction

A pile of rubble is all that's left of several huts demolished behind the Scarfe Building to make way for a new Faculty of Education library. More huts on West Mall are scheduled to come down this month, as is the old Armoury. The huts are a vestige of the university's rapid postwar expansion.

News Digest

September 20 has been designated Sexual Assault Education Day at UBC.

"Statistics indicate that the incidence of acquaintance sexual assault increases during September and October," said Margaret Johnston, UBC's student health outreach nurse.

"Students are faced with unfamiliar surroundings and feel pressure to make friends at that time, leaving them vulnerable to unwelcome situations."

Several campus student services organizations and the university administration will present displays and information booths on the south plaza of the Student Union Building between 10 a.m. and 2 p.m.

For more information, call 822-2415.

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Bob Philip, director of Athletics and Sport Services, has joined Law Prof. Dennis Pavlich as co-chair of the UBC faculty and staff fund-raising campaign.

The campaign, part of the World of Opportunity campaign, raises money for faculty and staff projects. Some of the money will be directed to faculty and staff development, conferences and seminars, and equipment and financial aid for students.

Pavlich has chaired the campaign since its inception in 1991-92. Philip joins this year's appeal on behalf of staff.

Faculty and full-time management and professional staff will receive more information on the campaign in campus mail by the end of the month, giving them the opportunity to contribute to faculty and staff projects in a number of ways, including payroll deduction.

The World of Opportunity campaign, with a total goal of more than \$260 million, concludes at the end of November.

•••••

Do you have any unwanted appliances, computer equipment, musical instruments, toys or books collecting dust in your basement or attic?

You can put them to good use by donating them to UBC Child Care Services.

Every year, each UBC child care centre puts together a wish list of items. This year's lists include used computers, software, games, televisions, radios, tricycles, wagons, baby strollers, VCRs, books, aquariums, microwaves and household plants.

Tax receipts can be issued for the depreciated value of each donation.

If you have an item that you think might be useful to a child care centre, please contact the campus Child Care Services office at 822-5343.

Greater student involvement expected in United Way drive

by Abe Heffer

Staff writer

Organizers of this year's United Way campus campaign have set a goal of \$300,000 in donations, an increase of 10 per cent over last year's goal.

The United Way is a volunteer-led, registered charitable organization committed to caring for people through funding for its 91 agencies and other non-member organizations.

The campus drive, which kicks off Oct. 4 and runs until Oct. 18, features increased participation and commitment on the part of students, said Prof. Chuck Slonecker, campaign chair and director of Ceremonies and Community Relations.

"AMS vice-president Janice Boyle has organized an expanded student campaign for awareness and fund-raising on the campus, making this year's effort truly a student-employee campaign."

The United Way campaign is versatile and provides an opportunity for people to channel their charitable giving to any organization they wish, Slonecker said.

Last year, donor support allowed United Way agencies to respond to thousands of cries for help.

More than 113,000 calls were answered on crisis lines; almost 40,000 people with physical disabilities received treatment; almost 39,000 people with mental disabilities were helped to live independently; more than 13,000 abused women received counselling; more than 41,000 seniors were helped to live independently; and more than 10,000 teens received counselling.

In total, more than 500,000 people in the Lower Mainland received services from United Way agencies in 1992.

Approximately 30 per cent of UBC's payroll staff of 6,100 have contributed to the United Way during the past two years in the second largest employee campaign in the Lower Mainland

and one of the largest in Canada. Slonecker said organizers hope to increase the participation rate on campus as well as the total contribution this year.

Volunteers will attempt to reach individuals on a one-to-one basis with personalized pledge cards, which will be distributed by Oct. 4.

"The personalized approach will enable us to simplify the

system and do away with the paper trail that has accompanied past United Way campaigns," Slonecker explained.



Activities planned for this year's campaign include draws for trips, vacation packages and other prizes, an Oktoberfest celebration, pancake breakfast, and a salmon barbecue.

For more information, or to become a United Way campaign volunteer, call 822-2484.

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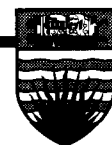
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Former AMS president Byron Hender to get Great Trekker Award

by Abe Heffer
Staff writer

In the fall of 1965, Byron Hender, then president of the UBC Alma Mater Society, presented Mrs. Evelyn (Sherwood) Lett with the Great Trekker Award.

Twenty-eight years later, Hender's life is about to come full circle.

On Sept. 30, Hender will receive this year's Great Trekker Award at a reception in the Student Union Building, on this, the 25th anniversary of the facility he helped bring to fruition as president of the AMS in 1965-66.

The Great Trekker Award is given annually by the students of UBC to a graduate who has

achieved eminence in his or her field. Past recipients of the award include writer and lecturer Rosemary Brown, author and broadcaster Pierre Berton and philanthropists Cecil and Ida Green.

Winners are cited for their worthy contributions to the community, their keen interest in UBC and outstanding service to UBC students.

Hender's contributions to UBC began the day he set foot on campus in the fall of 1960 as a student in the Faculty of Arts. He became photo editor of the *Ubsysey* that year and assistant co-ordinator of AMS publications the following year. He joined the student council in 1963 and remained a member through 1965-66, when he became president of the AMS.

It was during his year as president that the Student Union Building was at one of its many "crossroads." There were several of them, said Hender, as both the university and the AMS attempted to find a new home for the growing number of student activities on campus.

"Brock Hall, the Student Union Building at the time, had been the home of the AMS for many years," said Hender. "We needed more room, and the university was very supportive of that fact."

It was over dinner at the Faculty Club that Hender sat down with Bill White, a senior university representative who had been negotiating on behalf of UBC, and struck a deal.



UBC Archives photo

Former Prime Minister Lester Pearson (right) and former AMS President Byron Hender, this year's recipient of the Great Trekker Award, exchange greetings at the sod-turning ceremony in October 1965 for the Student Union Building.

"The new SUB had a long gestation period. I was one of many people involved in bringing the facility to fruition. I just happened to be around as president of the AMS at the time when the critical agreement was reached."

Although Hender didn't have the opportunity to enjoy the new building as a student, having graduated with a marketing degree from the Faculty of Commerce and Business Administration in 1968, he has certainly had the opportunity since then.

After graduation, Hender remained on campus as acting director of the alumni fund. He moved over to work with Food Services and the Bookstore before joining the Financial Aid office, where he spent 18 years as director.

A recipient of a 75th anniversary medal from UBC, Hender has been executive co-ordinator of Academic and Student Services, in the office of K.D. Srivastava, vice-president of Academic and Student Services, for the last two years.

The 25th anniversary of SUB will be one of the attractions during Homecoming '93 from Sept. 30 to Oct. 3. Displays will celebrate achievements of past and present students and will include historical photographs of SUB and UBC, as well as the AMS art collection.

There will also be events for the kids at SUB on Saturday, Oct. 2, which has been set aside for most of this year's key public attractions at Homecoming.

For more information on the Great Trekker reception, call Carol Forsythe at 822-2050. For more information on Homecoming '93, call 822-1993.



Gavin Wilson photo

Juggling Numbers

Maria Klawe, head of Computer Science, gives first-year students enrolled in the new Science One program a lesson in the fine art of juggling on the first day of classes. Klawe uses juggling to illustrate the principles of mathematical induction. Students from as far away as New York are among the 46 who have signed up for Science One, which was inspired by the success of the Arts One program. Many cited the small class size and interdisciplinary nature of studies as attractions. Science Dean Barry McBride hailed the program as a "novel and exciting educational experience."

Green College to host diverse group

by Abe Heffer
Staff writer

A stroll through the grounds of Green College reveals both the din of construction work and the sound of voices and music emanating from the recently completed student residences.

The voices belong to some of the 85 graduate students, 15 post doctoral scholars and visiting faculty, and five short-term visitors who will call Green College home.

Just as the architecture of UBC's new residential graduate student college reflects the special nature of West Coast design, so too will the college's scholarly life reflect its unique identity and influence.

"The students, post-doctoral fellows, visiting faculty and short-term visitors at Green College will be dedicated scholars with richly diverse backgrounds," said John Grace, dean of the Faculty of Graduate Studies.

"They will be expected to share interests and ideas in a lifelong learning process." In distancing itself from the formalities and isolation that have sometimes been associated with residential colleges, Grace said Green College should become a focal point for all graduate students at UBC.

"Green College has a mandate to bring people from all disciplines together. Those who have applied are eager for the opportunity to meet people from different areas. They offer a real sense of dedication and commitment."



Abe Heffer photo

Green College Principal Richard Ericson says UBC's new residential graduate college is an opportunity to foster scholarship of the highest calibre.

To Richard Ericson, the newly appointed principal of Green College, the opportunity to foster scholarship of the highest calibre in this setting is rare in most modern universities.

"This is a wonderful opportunity for graduate students to broaden their education in an environment that the students themselves will help shape and mould, said Ericson, cross-appointed to the Faculty of Law and the Dept. of Anthropology and Sociology in the Faculty of Arts.

"It's the contributions that the students make that will give Green College its distinct flavour."

Ericson himself has devoted his academic life to the exchange of ideas in an interdisciplinary setting, most recently

as director of the Centre of Criminology at the University of Toronto.

At Green College, Ericson will bring people together on a much broader scale as he continues his personal commitment to breaking down some of the barriers which tend to compartmentalize higher education.

Funded through a \$7-million gift from Cecil Green, which has been matched by the province of British Columbia, the college will foster an interdisciplinary community whose members come from various branches of the humanities, social sciences, sciences and professional faculties.

They will share their research, ideas and experiences in a series of conferences, workshops, seminars, meetings and other events.

Research sheds new light on literacy

The following article is adapted from a paper presented this summer by Asst. Prof. James Anderson from the Dept. of Language Education at the annual meeting of the Canadian Society for the Study of Education.

Our conceptions about how literacy is acquired have been challenged over the last two decades.

Where in the past researchers looked almost exclusively at the role of schools in literacy, studies in early literacy reveal that many children learn a great deal about reading and writing prior to formal instruction in school. This research suggests that much of this learning is the result of children's socialization into literacy through participation in such functional activities as writing shopping lists, labelling art work, reading environmental print (e.g., shop and street signs) and by being read to in an interactive way by a parent.

Such research has also led to a re-examination of the child's role in literacy acquisition. There is a shift away from thinking of children as receivers of skills transmitted by an adult toward that of an active constructor of literacy knowledge.

This theory of literacy development is usually referred to as "emergent literacy" and, while it has not gained universal acceptance, it has been widely accepted by educators and influences what goes on in schools.

Despite what appears to be a growing acceptance of theories about emergent literacy among educators, however, there are reasons to question whether emergent literacy is the cohesive universal phenomenon it is sometimes believed to be.

What does seem to be clear is that there is an increasing recognition that

literacy learning is a socio-cultural phenomenon; the way learning is mediated, the meaning which is ascribed to literacy, and the literacy activities in which members of a cultural group engage are determined by the beliefs and values of that particular group.

This obviously has immense implications for a child's developing literacy. Previous research with school-age children has shown that beliefs which teachers hold about literacy influence their teaching and subsequently their students' beliefs about and attitudes towards reading and writing.

There are also indications that when there is conflict between literacy learning at home and that at school, children's literacy learning does not progress satisfactorily.

Studies that look into relationships between home literacy experiences and children's emerging knowledge and attitudes towards reading and writing can provide greater understanding about factors affecting literacy learning. They also hold potential for helping design strategies when formal teaching begins.

A series of such studies are being conducted at the UBC Child Study Centre. Although the centre draws its students primarily from a relatively high socioeconomic group, even in this homogeneous population, differences are found in the home experiences and actual early literacy knowledge.

A particular study of mine has found that parents' beliefs about literacy fall along a continuum: while some parents hold beliefs that are congruent with an emergent literacy paradigm, others hold much more traditional beliefs.

Those in the emergent category would, for example, see interactive reading, where the parent reads aloud and encourages the child's responses as the story devel-



Children's perceptions of literacy are strongly related to their parents' perceptions, not just what they learn in school.

ops, as a first step in learning to read. Those in the traditional category would more likely see letter and word recognition as the first stages of reading.

As might be expected, children's perceptions of literacy are strongly related to their parents' perceptions. There was, however, only a weak link between parents' perceptions of literacy and their children's emerging literacy knowledge.

The argument that literacy learning is

imperilled when children develop traditional perceptions of reading as opposed to emergent views is not borne out by this study. In fact, on all of the literacy measures used, the children who hold more traditional perceptions scored as well, or better than, peers whose perceptions are more congruent with emergent literary perspectives.

This area of research needs further investigation.

B.C. kids score well in reading literacy tests

by Charles Ker

Staff writer

Who says TV saps the literary mind?

B.C. elementary and high-school students, some of whom admit to spending five hours a day in front of the tube, posted above average scores on a recent international test of reading literacy.

"Clearly television watching is something parents need to know about," said Prof. Victor Froese, co-ordinator of the B.C. test. "In terms of language development, there's an opportunity to capitalize on what these students watch."

Representing Canada among a list of 32 nations, B.C. ranked near the top alongside other English-speaking entries from New Zealand, Ireland and the U.S. Finland led all participants in terms of its students' comprehension of narrative (stories), expository (information) and document (charts and graphs) texts.

Froese, head of UBC's Dept. of Language Education, said there was no reason to believe Canadians would do poorly because B.C.'s school system is reasonably progressive and children here tend to read more than most.

Preparations for the IEA International Reading Literacy Study began in 1988 and followed with four years of testing and data collection. World-wide, the study tested the reading and writing skills of 210,000 students in grades 3-5 and 8-10.

For the study, reading literacy was defined as "the ability to understand and use those written language forms required by society and/or valued by the individual."

B.C. results were noteworthy because data was based on grades 3 and 8 making the Canadian contingent an average 10 months younger than other countries. To get a more accurate comparison with other developed European countries,



Promoting a response to texts enhances learning.

Froese recently completed a follow-up study using the same tests on 3,000 students in grades 3, 4, 5 and 8, 9 and 10.

Compared with much-heralded New Zealand, which tested grades 5 and 10, B.C. grade 5 participants scored higher marks with their answers to questions about narrative, composition and document passages. Grade 10 students outperformed New Zealanders in their comprehension of expository and narrative sections.

But student performance was just one aspect of the survey.

As well as linking achievement to the amount of TV watched at home, the study also examined how often students per-

formed "high-level" literacy activities in class. Here, comparisons show Canadians ahead of U.S. elementary-school counterparts in time spent reading silently, discussing books, reading their own writing and reading plays and dramas.

"It's not just a matter of feeding in information but promoting a response to texts which enhances learning," said Froese. "What's emerging from the data is that we are successfully creating links between reading and writing and that is pushing us in the right direction."

Other information yet to be culled from the study's mountain of reports and questionnaires links achievement to items

such as the amount of homework given out, number of books in the home and in the school library, years teachers have taught and amount of teacher education they have received.

Froese added the study will be invaluable to educational policy-makers because it maps out what teaching strategies are preferred in what countries, what teachers' goals are and what they do to achieve them.

Despite having children wait until the age of seven before starting school (it's six in most other countries), Finland posted the best scores in the international reading survey. The difference, said Froese, is that education is a top priority of government, teachers are held in high esteem by

society and parents are traditionally expected to have their children capable of reading before they enter the school system.

Said Froese: "We have to recognize that we have to get schools and parents working together because if everyone has the expectation that literacy will develop, then there's a good chance it will."

The preliminary report of the international study has been published in a book titled, *How in the world do students read?*, produced by the International Association for the Evaluation of Educational Achievement based in The Hague, Netherlands.



Charles Ker photo

Allison Tom: "Our goal was to paint a picture that others could learn from."

Unique learning centre challenged evaluators

by Charles Ker

Staff writer

Allison Tom knew she was in for a challenge the moment she set foot in the Invegary Adult Learning Centre.

Three years ago, the federal government's National Literacy Secretariat chose the UBC assistant professor and educator Hanna Fingeret to evaluate the centre's unique literacy program.

As a member of UBC's Dept. of Administrative, Adult and Higher Education, Tom's research speciality was in the relationship among women, employment and education. But she soon realized it would be early training in anthropology, particularly as an ethnographer, that would be her greatest asset during the Invegary investigation.

"My job was to ask questions in a way that led to some sort of meaning," she said. "The idea was to study who used the service, how they used it, why and to what effect."

What seemed a clear idea quickly blurred when she first strode into the old Kwantlen College building in Surrey. There, the eight-year-old literacy program shares an open space with three other educational groups. After negotiating a maze of dividers, Tom finally reached the literacy section where people sat at big, round tables writing, reading or talking, some walked about thinking aloud and others sat staring thoughtfully into space.

This scene of "self-directed learning," for which Invegary is noted, Tom would later describe as "focused, purposeful and effective."

Whereas other literacy programs base themselves more around a rigid textbook-teacher format, Invegary's method, along with that at its three-year-old affiliate Vancouver Municipal Workplace Program, was to help users set and achieve their own short- and long-term literacy goals.

Rather than measure success on how well a person does on a specific grade-level test, Tom and her colleagues were interested in finding out what difference the programs made to lives outside school.

"Evaluations which focus on grading people simply take the whole complex notion of literacy and compress it into

a test," said Tom. "What we're asking is why the program is important to people and how it fits into their life."

Working with Fingeret (a member of the U.S.-based non-profit organization, Literacy South), five graduate students and two teachers from the program, Tom spent a year deciphering how people used the smorgasbord of learning options offered at the Surrey and Vancouver centres.

Flexible hours allowed learners to come in the morning, afternoon or evening for as long as they wanted and as many days a week as they chose. They could attend formal conversation classes or consult one-to-one with teachers and volunteers who were perpetually on the move.

Approximately 620 people passed through Invegary during the study. Among them were those fluent in several languages or literate in their first language and others with little or no reading and writing ability.

Tom also pointed to the wide cross-section of cultures and economic backgrounds among users of the centres from single-mothers on welfare to wealthier immigrants toting computerized pocket translators.

The UBC research team employed a variety of techniques to gauge the program's effectiveness in covering this diversity. These involved following individual teachers around for a day documenting their conversations and interviewing students, teachers and volunteers. Interviews were also conducted with family members at home and with work colleagues at the office to ascertain what impact the program had on those enrolled.

The resulting 6,000 pages of field notes form the basis of two, 250-page reports which Tom refers to as "a process, not a product," a process which has become one of the most extensive literacy evaluations ever.

Tom said the reports, due out in January, weren't meant solely for internal use at the two centres but would hopefully be helpful to practitioners, administrators and literacy academics across Canada.

"Our goal was to paint a picture that others can learn from," said Tom. "To share ideas, inspiration and promote an awareness that literacy training is a complex process."

Learning connections

Computer project reflects future trend

by Charles Ker

Staff writer

"You are guaranteed to find much that is unusual in the following pages. Some of the writing is innovative and revealing. Some of the writing is perhaps symptomatic of the limitations of electronic communication. Either way, meeting face-to-face Thursday is bound to be an educational experience for all involved."

- Greg Dixon, editor, Systemhouse Pacific News

There were at least 28 employees at the Vancouver office of Systemhouse who couldn't wait to get their hands on the company's December newsletter.

For six weeks, they'd each been corresponding via E-mail with Grade 11 students from a local high school. This unique twinning exercise was part of a UBC-based study called the Learning Connections Project designed to enhance language and literacy in class and boardrooms.

Having bared their souls for a month and a half to neophyte journalists on screen, the employees were anxious to see what details emerged in print.

On page seven, Andy Jones-Cox, director of systems integration, found himself dubbed "Sir Andy." His student partner, Jennifer Liem, had adopted a medieval theme in her article describing Jones-Cox as "trained in the ways of a knight at a university in this country, learning about the mysterious Forces of Math and Computer Science."

Turning to page nine, William Jubran discovered himself likened to a "couch potato" who "pigs out on chocolate whenever he gets his hands on some." And on the bios ran from serious to witty to out-of-this world.

Brainchild of Prof. John Willinsky, the connections project sought to infuse a sense of responsibility into student writers. While they did get school credit for their work, articles were being produced for an adult audience outside the classroom. The experience forced teenagers to be fair, accurate and inquisitive. Employees, on the other hand, were forced to discard technical jargon and express themselves in a language anyone could understand.

"Many employees compared it to pitching proposals to clients who had little computer background," said Willinsky, director of UBC's Centre for the Study of Curriculum and Instruction. "As for the students, they were encouraged to have some fun with their writing so we wouldn't end up with 28 boring stories."

In terms of literacy, Willinsky said the exercise successfully incorporated elements of fiction, non-fiction, journalism and rhetoric with a dollop of social and vocational studies thrown in.

But the Systemhouse experiment itself was a portion of the two-year undertaking.

Working with Mount Saint Vincent University professor Lorri Neilsen, Willinsky and five UBC graduate students succeeded in hooking up 100 Vancouver students with 100 students at a high school in Halifax through the international computer network, Internet. What was originally intended as a cross-country dialogue on Canadian unity soon turned international in scope.

Through the Internet system, students and teachers had access to more than 10 million computers worldwide. Contacts were made with other classes across the United States and Australia either in formal class projects or informal pen-palling.

A cross-cultural exchange between Vancouver and Kyoto, Japan saw students in each country analysing a short story which had been translated from Japanese into English.



Moving toward a "super data-highway."

Vancouver students even made contact with nuclear scientists in Russia.

Said Willinsky: "It didn't last long, and they didn't have much in common but both sides were keen to connect."

While the project has been an unqualified success in terms of productivity and sparking student imagination and interest in writing, Willinsky's initial enthusiasm was tempered over time.

Seven people setting up a network for 200 students, each with their own computer account, proved a daunting task. System malfunctions and a teachers' strike didn't help.

"In spite of all the rhetoric and euphoria around these advanced technologies, there is still some distance to go before we can realistically ask classroom teachers to get involved in these kinds of projects," said Willinsky. "You have to be realistic about resources and support you need to pull it off."

Even so, the Nova Scotia government has made the connections project a permanent part of the educational scene in that province and Prime Minister Kim Campbell has mentioned that (having already co-sponsored Willinsky's project along with private corporations) the federal government may electronically connect 300 schools nationwide.

And then there's U.S. President Bill Clinton's dream of a "super data-highway" capable of carrying cable TV and all manner of information sources, part of which would be an educational component.

As Willinsky says, "it's coming, it's just a question of when."

Calendar

September 19 through October 2

Monday, Sept. 20

Astronomy Seminar
Chemical Enrichment Of The Milky Way Galaxy. Tammy Smecker-Hane, Dominion Astrophysical Observatory. G&A 260 at 4pm. Call 822-2696/2267.

Archeology Lecture
Human Sacrifice Among The Aztecs. Dr. Patricia Anawalt, UCLA. Museum of Anthropology Theatre at 8pm. Call 822-2889.

Tuesday, Sept. 21

Biological Sciences Seminar
Pi Enhancement Of Dark Respiration In The Pi-limited Green Alga *Selenastrum Minutum*: Interactions Between H⁺/Pi Cotransport, The Plasmalemma H⁺ - ATPase, And Dark Respiratory Carbon Flow. David Gauthier, Ph.D. candidate, Botany. BioSciences 2000 from 12:30-1:30pm. Call 822-2133.

Atmospheric Data Assimilation Using Kalman Filters. Roger Daley, Canadian Climate Centre, TO. BioSciences 1465 at 3:30pm. Call 822-3626.

Chemistry Seminar
Techniques For The Bio-Analytical Laboratory: Regional Mass Spectrometry Centre. Frederick Lasserre 104 from 9am-12:30pm. Call 822-3235.

Chemistry Pacific Coast Lecture
Why Rhodium In Homogeneous Catalysis? Professor Peter Maitlis, University of Sheffield, UK. Chemistry 250 South at 1pm. Call 822-3266.

Statistics Seminar
On The Estimation Of Gaussian Means Jean Meloche, UBC. HA 413 from 4-5:30pm. Call 822-2234.

Continuing Studies Free Series: Election Coverage
The Deficit: How Much Does It Matter And What Can Be Done? Panel: Jim Brander, Commerce; Angela Redish and Jon Kesselman, Economics. Hotel Georgia York Rm. from 12-1:30pm. Pre-registration not required. Call 222-5272.

Wednesday, Sept. 22

Applied Mathematics Colloquium
Symplectic Integration Of Hamiltonian Systems. Sebastian Reich, Postdoctoral Fellow, Computer Science. Math Bldg. 203 at 3:30pm. Call 822-4584.

Geography Colloquium
Networks Of Small Business And Local Governments: A New Pattern Of Foreign Direct Investment In China. You-tien Hsing, School of Community/Regional Planning. Geography 201 from 3:30-5:00pm. Call 822-5612.

Thursday, Sept. 23

Cooperative Education Program
Info meeting for 2nd year Electrical and Mechanical Engineering students. IRC #2 from 12:30-1:30pm. Call 822-3022.

Recruitment Fair
Graduate Studies Information Day. Six Cdn. universities

represented. Grad Centre Ballroom from 12:30-2:30pm. Call 822-9546.

Medical Genetics Seminar
Molecular Analysis Of A Novel B1 Variant Of Tay-Sachs Disease. Scarfe 205 at 4:30pm. Call 822-5312.

Physics Colloquium
d-Wave Pairing In High-Tc Superconductors. Doug Bonn. Hennings 201 at 4pm. Call 822-3853.

Friday, Sept. 24

Paediatric Grand Rounds
Paediatric Airway Problems. Dr. Keith Riding/Dr. Fred Kozak, ENT specialist, BCCH. G.F. Strong Auditorium at 9am. Call 875-2118.

Health Care/Epidemiology Grand Rounds
The Working Health Centre. Speaker: Dr. Yrjoe Engestrom, Helsinki, Finland. James Mather Bldg. 253 from 9-10am. Call 822-2772.

McDowell Lecture in Chemistry
Nuclear Spin Dynamics And Molecular Dynamics. Professor R.R. Ernst, 1992 Nobel Prize Recipient in Chemistry. Chemistry 250 south at 12:30pm. Call 822-3255.

UBC Bookstore Popular Authors
Michael Ondaatje, winner of the Governor General's Award and Britain's Booker Prize will be reading and autographing his new book: *The English Patient*. HA 110 from 12:30-1:30pm. Call 822-2665.

Engineering Seminar
Drying Of Sludge In A Spouted Bed Of Inert Particles. Meinardo Boizan, Cuba. Chem. Engineering 206 at 3:30pm. Call 822-3238.

Saturday, Sept. 25

Museum of Anthropology Performance
Te Waka Huia, Maori dancers and competition winners perform in the Great Hall at 2:30pm. Call 822-5087.

Vancouver Institute Lecture Series
Symbols Of Revolt: Environmental Politics And Beyond. Michael Jacobs, Lancaster U., UK. Woodward IRC #2 at 8:15pm. Call 822-3131.

Monday, Sept. 27

Asian Research Seminar
Sino-British Negotiations On Hong Kong During Governorship Of Chris Patten. Joseph Yu-shek Cheng, Dean, Humanities/Social Sciences, City Polytechnic of HK. Asian Centre 604 from 12:30-2pm. Call 822-4688.

Centre for Japanese Research Seminar
Lunchtime series. Concepts Of The Otter In Japanese History. Owen Griffith, History. Asian Centre 604 from 12:30-1:45pm. Call 822-5612.

Applied Mathematics Colloquium
What Is Experimental

Mathematics? Professor Jonathan Borwein, SFU. Math 203 at 3:30pm. Call 822-4584.

Astronomy Seminar
The Environment Of Lyman α Absorbers In The Sightline to 3C273. Simon Morris, Dominion Astrophysical Observatory. G&A 260 at 4pm. Call 822-2696.

Tuesday, Sept. 28

UBC Bookstore Popular Authors
Ken Dryden, author of *The Moved And The Shaken* will be reading and autographing his new book. Bookstore from 12:30-1:30pm. Call 822-2665.

Oceanography Seminar
Kristin Orians. BioSciences 1465 at 3:30pm. Call 822-3626.

Lectures in Modern Chemistry
Industrial Applications Of Photochemistry. David Eaton, Dupont Central Research And Development. Chemistry 250 south at 1pm. Call 822-3266.

Botany Seminar
K⁺ Fluxes In *Chlamydomonas Reinhardtii*. Ph.D. candidate. BioSciences 2000 from 12:30-1:30pm. Call 822-2133.

Chemical Engineering Seminar
Kinetics And Mechanisms Of Oxygenate Reactions On Transition Metal Surfaces. Chem. Engineering 206 at 3:30pm. Call 822-3238.

Statistics Seminar
Bayesian Statistics Applied To The Orange Roughy Fishery. Paul Kinas, UBC. HA 413 from 4-5:30pm. Call 822-2234.

Wednesday, Sept. 29

Asian Research Seminar
The Historical Significance Of Malay Culture In The Political Systems Of Asean Countries. Dr. Hakan Berggren, Swedish Ambassador to Canada. Asian Centre 604 from 12:30-2pm. Call 822-4688.

Geography Colloquium Series
Forest Site Nutrients And The Sustainability Of Timber Harvesting. Tim Ballard, Soil Sciences. Geography 201 from 3:30-5pm. Call 822-5612.

Continuing Studies Free Series: Election Coverage
Are Social Programs Still A Sacred Trust? Panel: Glenn Drover, Social Work; Bob Evans, Health Care Economics; Sharon Manson Singer, Social Work; Jane Pulkington, Sociology, SFU. Hotel Georgia York Rm. from 12-1:30pm. Pre-registration not required. Call 222-5272.

Thursday, Sept. 30

Graduate Scholarships Day
Information session for all graduate students. Dean of Graduate Studies, Awards Officer and various representatives from external agencies are represented. Grad Centre Ballroom from 8:45am-3:30pm. Call 822-4556.

Institute of International Relations Lecture

Sustainable Human Development: First Lecture In The UBC International Forum On Human Population Dynamics. IRC #6 at 12:30pm. Call 822-9546/2848.

Academic Women's Association Luncheon
Some Challenges Faced In The University Today. Dr. Martha Salcudean, Head, Mechanical Engineering. Faculty Club Salons A&B from 12-2pm. Sandwich buffet and cash bar \$14.54. New and renewal members are welcome. Call 822-6445.

Philosophy Lecture
Individuation, Identity, And The Labels Of Identical Particles. Don Robinson, U. of Toronto. Buchanan D-348 from 1-2:30pm. Call 822-3292.

Physics Colloquium
The Wave-Function Is Real After All. Y. Aharonov, S. Carolina/Tel Aviv. Hennings 201 at 4pm. Call 822-3853.

CICSR Faculty Forum
On Seeing Robots. Alan Mackworth, Computer Science. CICSR/CS Building 208 from 4-5:30pm. Call 822-6894.

Friday, October 1

Ophthalmology Fall Clinical Day
Ocular Pharmacology And Therapeutics. Chair: Dr. F.S. Mikelberg, and visiting panel. VGH/UBC Eye Care Centre Auditorium, 2550 Willow Street from 8am-3pm. Refreshments at 7:30, 2nd floor lounge. Call 875-5266.

Notices

Student Housing
The off-campus housing listing service offered by the UBC Housing Office has been discontinued. A new service offered by the AMS has been established to provide a housing listing service for both students and landlords. This new service utilizes a computer voice messaging system. Students call 822-9844, landlords call 822-9847.

Photo Exhibit
Dialogue With Nature. Oct. 2-10. Photos by Daisaku Ikeda. Asian Centre Auditorium from 1am-4pm daily. Call 822-4688.

Centre for Faculty Development
Sept 19, 25 and 26. Instructional skills workshop for graduate teaching assistants in the Faculty of Arts. Adult Education Research Centre, 5760

Health Care/Epidemiology Grand Rounds

Analysis Of The Determinants Of Occupational Exposures: Using Robust Variance Methods To Overcome The Problem Of Left Censored Data. James Mather Bldg. 253 from 9-10am. Call 822-2772.

Museum of Anthropology Reception

Join author Audrey Hawthorn and staff in launching her book: *A Labour of Love: The Making Of The Museum Of Anthropology — The First Three Decades 1947-1976*. MOA at 3pm. Call 822-5087.

English Lecture

Chaucer In Our Time. Derek Brewer, prof. emeritus, Emmanuel College, Cambridge. Buchanan A-205 at 12:30pm. Call 822-5675.

History Lecture

Cuba In Crisis. Professor John M. Kirk, Dalhousie U. Buchanan A204 at 12:30pm. Call 822-4044.

History Seminar

Ambiguous Relations: Canada And Cuba Since 1959. Professor John M. Kirk. Buchanan Penthouse from 4-5:30pm. Call 822-4044.

Chemical Engineering Seminar
UBC/Paprican Fibre Analyzer. James Olson, grad student. Chem. Engineering 206 at 3:30pm. Call 822-3238.

Saturday, October 2

Vancouver Institute Lecture
Southern Africa In The New World Order. The Hon. Nathan Shamuyarira, Minister of Foreign Affairs, Zimbabwe. Woodward IRC #2 at 8:15pm. Call 822-3131.

Toronto Rd. from 8:30am-4:30pm. Call 822-9149/9164.

Frederic Wood Theatre
Season tickets now on sale. *The Love of the Nightingale* Sept. 22-Oct. 2; *The Doctor's Dilemma* Nov. 10-20; Toronto, Mississippi January 12-22; *Loves Labours Lost* Mar 9-19. Call 822-2678/3880 for ticket information.

Campus Tours
School and College Liaison tours provide prospective UBC students with an overview of campus activities/faculties/services. Every Friday at 9:30am. Reservations required one week in advance. Call 822-4319.

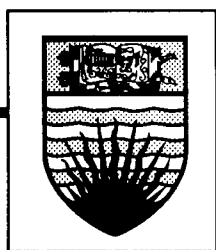
UBC Bookstore
Winter hours now in effect. Mon., Tue., Th., Fri. 8:30am-5pm; Wed., 8:30am-8:30pm; Sat., 9:30am-5pm. Call 822-2665.

UBC REPORTS

CALENDAR DEADLINES

Material for the Calendar must be submitted on forms available from the UBC Community Relations Office, 207-6328 Memorial Road, Vancouver, B.C. V6T 1Z2. Phone: 822-3131. Fax: 822-2684. Notices exceeding 35 words may be edited.

Deadline for the September 30 issue of UBC Reports — which covers the period October 3 to October 16 — is noon, September 21.



THE UNIVERSITY OF BRITISH COLUMBIA

REPORT OF THE COMMITTEE TO REVIEW THE OPERATION OF THE OFFICE OF THE REGISTRAR



THE UNIVERSITY OF BRITISH COLUMBIA

September 16, 1993

Dear Colleague,

A few months ago my office commissioned an external review of the Office of the Registrar. The previous review took place in 1988. The final report of the 1993 review is published below. Your comments and suggestions are most welcome.

Sincerely,

K.D. Srivastava
Vice President
Student and Academic Services

Submitted to Dr. K. D. Srivastava, Vice President, Student and Academic Services by members of the Committee:

A. Morgan, Registrar, Queen's University (Chair)

W. Washburn, Executive Director, Admissions and Records, University of Washington

A. Kozak, Associate Dean, Undergraduate Programs and Faculty Affairs, Faculty of Forestry, University of British Columbia

The Committee to review the operation of the Office of the Registrar was established by Dr. K. D. Srivastava in May 1993. The previous review took place in 1988.

The terms of reference of the Committee were to review:

1. Range, quality and effectiveness of services provided.

2. Impact of emerging trends in registrarial services in North America on the work of the Office.

3. Relationship with other academic and service units on Campus.

4. Internal organization of the work of the Office, and potential for enhancing resource utilization.

The Committee reviewed printed material provided by the Vice President and the Registrar's Office. It convened at UBC, May 10, 11 and 12 and held discussions with the following:

Dr. K. D. Srivastava, Vice President, Student and Academic Affairs

Dr. R. Spencer, Registrar

Dr. G. Wynn, Associate Dean, Arts

Dr. Holm, Associate Dean, Science

Dr. B. Sheehan, Associate Vice President, Information and Computing Systems

Ms. M. Cooney, Associate Registrar, Admissions

Ms. A. Runnals, Assistant Registrar, Faculty and Secretariat Service

Ms. A. Branch, Manager, Scheduling and Administration

Ms. G. Wong, Associate Registrar, Records and Registration

Ms. M. Stott, Director, School and College Liaison Office

Ms. C. Gibson, Director, Awards and Financial Aid

Dr. D. W. Strangway, President and Vice Chancellor

Dr. D. R. Birch, Vice President Academic and Provost

Dr. A. B. Gellatly, Vice President Administration and Finance

Members of Committee on the Appointment of the Registrar:

Dr. Tees, Dr. Cook, Dr. B. McBride and Dr. K. D. Srivastava

EXECUTIVE SUMMARY

The report begins with general remarks and what we hope are useful practical suggestions about the major units in the office under the heading of the first term of reference. In the three following sections it provides some recommendations and discussion under the headings of the last

three terms of reference.

1. RANGE, QUALITY AND EFFECTIVENESS OF SERVICES PROVIDED

It is the opinion of the review committee that the Registrar's Office is effective in carrying out its operational mandates and in motivating employees to provide a quality product. The entire staff takes pride in their work and in the improvements to both staff development and to operational effectiveness obtained over the past several years. The Registrar has invested both his personal interest and budget in staff development and this attention will continue to benefit the office as staff are called to be even more flexible in adapting to emerging technologies.

In the body of the report, the review committee has a number of suggestions for smoother operations, particularly involving the TELEREG system, - including the effect of faculty based enrolment restrictions and the need for prerequisite checking - as well as Admissions and Records.

2. INTERNAL ORGANIZATION

The review committee felt that the Office was structured to meet the functions and priorities of the Registrar's Office and the varying workload of the different units.

The review committee made two recommendations regarding internal organization:

1. The Committee recommends that cross training be provided so that anyone at the front desk is able to answer questions about all areas. Complex and sensitive questions should be referred to counsellors away from the front counter area. With cross training staff can also be shifted to the front counter from other areas.

2. The review committee strongly recommends funding the development of systems with a priority on the development of a new admissions and awards system.

3. IMPACT OF EMERGING TRENDS IN NORTH AMERICA ON REGISTRARIAL SERVICES

The trends that are affecting universities in general are also affecting registrarial services. The following topics are discussed in the main report.

3.1 Rapidly Evolving Systems and Technology

Specific areas that should be monitored include:

- The use of electronic media to distribute information, both inside and outside the University.

- Electronic Data Interchange.

- Distributed Computing and Networking.

- Supplementing Telephone Registration Systems with Terminal/PC Access.

- B.C. Post-secondary Application Service.

3.2 An Emphasis on Enrolment Management and the Student as Customer.

3.3 Demand for Greater Accountability and Information by Governments, Donors, and the General Public.

3.4 Emphasis on Educational Equity.

3.5 Emphasis on Internationalization/Globalization.

3.6 Restrictive University Budgets.

4. RELATIONSHIP WITH OTHER ACADEMIC AND SERVICE UNITS ON CAMPUS

4.1 Faculty Offices

The Faculties with whom the review committee met stressed that members of the office of the Registrar were very hardworking and that service in the office was much improved, particularly in admissions. However, there was a lack of agreement between the two largest faculties and the Registrar's Office about priorities of the office.

5. RECOMMENDATION

The committee made three recommendations:

1. A small committee should be established to advise the registrar on priorities, particularly in the area of systems development.

2. The central administration should make clear to faculties that the Registrar's Office is expected to champion the viewpoint of the university as a whole and of students in debates about academic policy, if this is, indeed, the role of the office.

3. Establish a task force to look at the best form for a closer association between the Registrar's Office and the Office of School and College Liaison and the Office of Awards and Financial Aid.

6. CONCLUSION

The review committee expressed its appreciation and thanks to participants in the review. UBC can be proud of its Registrar's Office.

REPORT

1. RANGE, QUALITY AND EFFECTIVENESS OF SERVICES PROVIDED

The committee met collectively and individually with senior managers of the Registrar's Office and with the entire staff in a morning information session. During all of these meetings it was apparent the entire staff took pride in their work and in the improvements to both staff development and operational effectiveness obtained over the past several years.

1.1 General Registrar's Office

The Registrar's Office is meeting the basic responsibilities of the Office effectively with minimal staff. From the reviewers' perspective it appears that very little staff flexibility exists to assume additional functions or improve services. One faculty representative we interviewed expressed the opinion that the Registrar's Office appeared to be on the verge of an operational crisis.

Although we do not share this view, we

understand that budget considerations may have led to office efficiencies that are perceived as reduced service to faculties. Several of the faculty we interviewed expressed dismay that some tasks previously provided by the Registrar's Office had been offloaded to academic units.

The strategy of developing an in house computing staff will have long lasting benefits to the office and should be applauded. The movement away from mainframe systems to distributed computing is also beneficial and recognizes changing cost structure. Staff development is extremely important in an office evolving from a primarily clerical environment to one with modern computational services and an emphasis on academic and student support services. The Registrar has recognized the need for training and has introduced programs that will yield long term benefits to the university, taking full advantage of the University's extensive offerings in staff development.

1.2 Admissions

The Admissions Office appears to be very well run, taking excellent advantage of seasonal employees to reduce costs. Faculty members were exceptionally well satisfied with the quality and level of service being offered, given the computing resources available.

The Admissions Office makes surprisingly effective use of their obsolete computer system, written in programming languages no longer supported at UBC. Computer generated letters also contribute to the overall efficiency of the office. The automated transfer credit system saves considerable time.

A long range goal should be to integrate the admissions system into the student information system. If the admission data set were updated when a student is enrolled, statistical and yield reporting would be much easier since all information needed for the report would be in one file.

Most US universities ask applicants offered admission to confirm their intention to enrol with a deposit on first term tuition. The interest on these deposits can be an additional source of revenue. Also admissions offices get a clearer indication of the acceptance rate before registration. This can be very helpful with early offers, transfer students and waiting lists. The University of Washington (UW) does not evaluate transfer credits in detail until the confirmation payment is received. The yield of confirmed transfer students is about 75% of offers, resulting in 25% fewer transfer evaluations - a substantial work savings.

The audio library telephone system has helped answer a high volume of calls, but many callers still want to talk to a person. This is consistent with experience in other admission telephone systems and can only be improved by a costly expansion of admission personnel. Instead the review committee recommends that the telephone system be expanded to include a voice mailbox, to collect application requests.

The office has implemented a very successful program to offer early admission, plus a scholarship and residence to applicants whose GPA in the previous year was 4.0. Now that the office has experience with early offers it should consider expanding the program, (without the added incentives) to include students with a lower GPA, perhaps down to the 3.75 level.



REPORT OF THE COMMITTEE TO REVIEW THE OPERATION OF THE OFFICE OF THE REGISTRAR

1.3 Registration and Records

The telephone registration system, TELEREG, has been successful in improving registration services at UBC and has placed the university at the forefront of technology in this area. System changes to enable faculties to take advantage of telephone registration efficiencies and to allow the university to realize the full potential of telephone registration should be supported.

The Registrar's Office provides extensive service to students by staffing up to five hot lines during peak periods. Statistics are kept on the number of such calls but the reasons for the calls are not identified. The number of calls received seems excessive and an effort should be made to determine the reason for these calls.

The review committee heard about the following difficulties, which may have contributed to the number of calls on the hotline last fall:

-When TELEREG restricts course registrations based on faculty placed restrictions, they are not always printed in the Registration Guide nor spoken on the TELEREG. Students naturally call to determine the difficulty. At UW restrictions are listed in the registration guide and restricted students are referred to the guide by a spoken message. No restrictions are possible if not printed in the guide. Full disclosure of information on restrictions would help TELEREG and provide better service to students.

-One of TELEREG's features is to make spaces available in courses when other students drop them. This feature was defeated when TELEREG enrolment levels of a required introductory English course were reduced to zero. With the enrolment at zero, courses never became available and large numbers of students called the hotline to find out how to gain access to them.

When UBC decentralized controls on course registration to departments, the loss of central control has sometimes had unwelcome results. The Registrar's Office, in consultation with the faculties, should consider developing guidelines for academic users of the registration system to specify the kinds of changes that are appropriate. These should result in a friendlier, more interactive system, with fewer registration frustrations, fewer hot line calls and lower costs.

These guidelines should answer questions such as:

-Should departments be allowed to set enrolment limits to zero after a course has filled?

-Should they be permitted to introduce new restrictions (such as limiting the course to final year students) after the registration guide has been printed?

-Should the Registrar's Office take over management of the schedule file after TELEREG has begun, to avoid these problems?

There seems to be widespread support for adding prerequisite checking to TELEREG. This feature was discussed in the implementation planning, but was omitted because of complexity and limited computer resource. Faculty continue to believe that this would be an important improvement. Apparently many ineligible students now occupy courses without being detected until after classes begin. A list identifying students without necessary prerequisites is available upon request but an interactive system would be more efficient.

The number of course prerequisites listed in the calendar may be excessive. To have TELEREG check interactively for all these prerequisites during registration would slow the system considerably and is probably not feasible.

Faculty should review these prerequisites and change as many as possible to recommended instead of required. Prerequisite checking for a small number of critical courses should certainly be possible even with the existing system design.

Although course enrolment counts are available on screen, periodic management reports should be distributed to facilitate course enrolment management and to keep faculty abreast of enrolment changes. Such reports would indicate courses that were closed, nearly closed, and those that were underenrolled. Strategic times for providing these reports can be identified by meeting with key faculty.

Records and Registration has made significant improvements in its transcript production schedule and staff are excited about a new system being developed with B.C. Telephone to offer a more automated transcript production system. Staff are also encouraged that transcript production has been identified as a Total Quality Management project. Online transcript production should be possible, with transcripts printing in the office or overnight in batch mode. Both alternatives are available at UW where major advising offices also can produce transcript-like advisor worksheets on site when students stop in for advice. Students at Queen's order transcripts on terminals and 24 hour turnaround and emergency service is available. Faculty advisors can call up the transcript on terminal at any time.

We were reminded how difficult it is to collect grades for seniors in their last term and to process such grades in time for graduation. One suggestion that works well at Queen's is to print a separate grade roster (mark sheet) for those who will be graduating that term. Although faculty may not be able to get all grades submitted quickly, they can concentrate on returning these critical grades and faculty offices can hone in on problems.

The Registrar's Office should also consider using opscan grade collection sheets to facilitate grade collection and reporting and for possible savings. Optical scanners exist at the University and implementation should be relatively inexpensive. Scanning of grades is done extensively in the US.

Grade reporting to students is being considered for TELEREG. This is a very useful application. Grade inquiry normally comes at a time that the system is not being heavily used for registration. UW has reported grades this way for two years. About 60,000 grade inquiry calls are received each quarter. If implemented, the Registrar's Office should consider providing grade summary information, as well as individual grades, and access to past terms, as well as the current term. An alternative is to use a terminal/PC inquiry system.

The front desk needs further evaluation to see what further improvements can be made. Service is better than before but some individuals we interviewed still desire improvements. Reviewers were provided with the results of a front counter questionnaire showing that 98% of respondents felt the Registrar's Office was "satisfactory." However, a more detailed questionnaire asking specifically about courtesy, friendliness, etc. should be administered at a busy time of the year. The Office has identified service as an important part of their mission and should be asking students for feedback. A broader evaluation scale and questions carefully designed not to be leading should provide useful and encouraging information.

1.4 Systems

The Associate Director for systems was

not available to meet with us, but we were provided with a written description of system development activities - an impressive list. Much has been accomplished in the last two years and there is an ambitious schedule waiting to be completed. The systems unit is critical to efficient operation of the Registrar's Office and to the provision of academic and student support services. The registrar has wisely expanded internal computing resources and, with the transfer of resources from Information Systems, computing should be very productive.

New systems developed to meet internal needs on PC's using Foxpro demonstrate the ease with which systems can be developed on these user friendly systems. Attention must be directed to how these smaller systems will be integrated with the campus wide information network. Development on local systems may result in efficient operation but campus wide access to the data is also necessary. For example, the graduation system works well for managing in office convocation lists, but the information in the system should be uploaded or placed on a system that is accessible to the various faculties so they too have on-line access to the graduation list in their faculties.

The plan to distribute computing budgets is an interesting one that should lead to more efficient use of computing and more thoughtful choices about computer applications. The Registrar should consider appointing a campus-wide steering committee to recommend system development priorities for activities falling within his area. This need not be a standing committee: once the long term schedule is developed the steering committee can be dismissed. It should include staff from operating units using the SIS, from the faculties of Arts and of Science, and from some of the smaller faculties.

The transition from mainframe to distributed computing will be strategically challenging. Cost savings will apparently result, but mainframe systems must remain operational while new hardware is acquired and systems are programmed and designed. This overlap may require additional funding. If cost savings are certain the Registrar's office may wish to consider an internal loan from the university to acquire hardware and develop the necessary programs, a strategy implemented in certain ventures with success at Queen's.

Computer support systems are vital to the university as demand for and interest in data expand. This area must be staffed at a level that can continue to provide adequate data services to this large and complex university. As computing becomes more commonplace and we progress toward an information society, the Registrar's Office must be able to meet the University's need for student and instructional information. It is important not to fall behind in this rapidly changing area.

2. INTERNAL ORGANIZATION

The review committee felt that the Office was structured to meet the functions and priorities of the Registrar's Office and the varying workload of the different units.

It noted with approval the migration of employees from one unit to another at peak periods, the use of seasonal workers and the push to improve processes through initiatives such as quality management.

The review committee was impressed by the budgetary and personal commitment to professional training and staff upgrading on the part of the Office carefully working out staff training plans.

There is also a clear commitment by the University to staff development through its MOST program which should provide benefits in staff productivity and morale.

The review committee felt that leadership from the Registrar and senior managers has led to a positive attitude to change on the part of staff. A number of other initiatives contribute to staff involvement and morale: internal and external newsletters, awards for ideas and inclusion in planning groups.

The review committee felt that present working conditions were inadequate, poorly arranged and crowded. Cramped, shabby quarters immediately create an impression that staff are unprofessional and do not welcome students. A quick glimpse of the new premises in Brock Hall suggested that great improvements in layout and reception are possible and that the image of all student services would be greatly enhanced.

Sharing a reception counter causes difficulty if staff are not cross-trained to deal with questions of both Registration/Records and Admissions. When some staff at a reception counter can answer only specialized questions and cannot help with general inquiries, students feel they are being ignored. While cross training can help with this we acknowledge that admissions and registration/records are very different areas and cross training may be difficult. The UW has found it useful to have a separate admissions reception area with separate cubicles that provide a more personal environment as well as admission counsellors in nearby private offices for in depth admission advice. Students with sensitive personal information to convey may find this nearly impossible at a public counter.

Front office staff should become more familiar with general university rules to answer as many questions as possible on site and, whenever possible, refer students to internal management staff instead of other offices.

Now that more experienced and qualified staff have been appointed to the front counter **the Committee recommends that cross training be provided so that anyone at the front desk is able to answer the common questions about all areas. Complex and sensitive questions should be referred to counsellors away from the front counter area. With cross training staff can also be shifted to the front counter from other areas.**

There was some concern that staff at the front counter were not as well trained to explain the reasons why admission was denied and in some cases denied applicants were referred to a Faculty for explanation. This may be an organizational deficiency caused by the separation of the Office of School and College Liaison, discussed in section 4.

The review committee did have some questions about the organization of the Faculty and Secretariat Services Unit. Not all the units originally scheduled to report to the manager are currently reporting to her. Faculty and Senate Secretariat Services may do so at a future date. One faculty member interviewed suggested there was overload on those producing publications at certain periods. Since the major publications are produced in a concentrated timeframe there may be excess capacity at other times. The discussion of the relationship between the Registrar's Office and Faculty and Administrative Offices includes further comments.

Committee members did not see an obvious reason why the student exchange programs activity had been assigned to the Faculty and Secretariat Services Unit.



THE UNIVERSITY OF BRITISH COLUMBIA

REPORT OF THE VICE-PRESIDENT ADMINISTRATION AND FINANCE 1992-93

TABLE 3
Total Revenue by Source
for the year ended March 31, 1993
(millions of dollars)

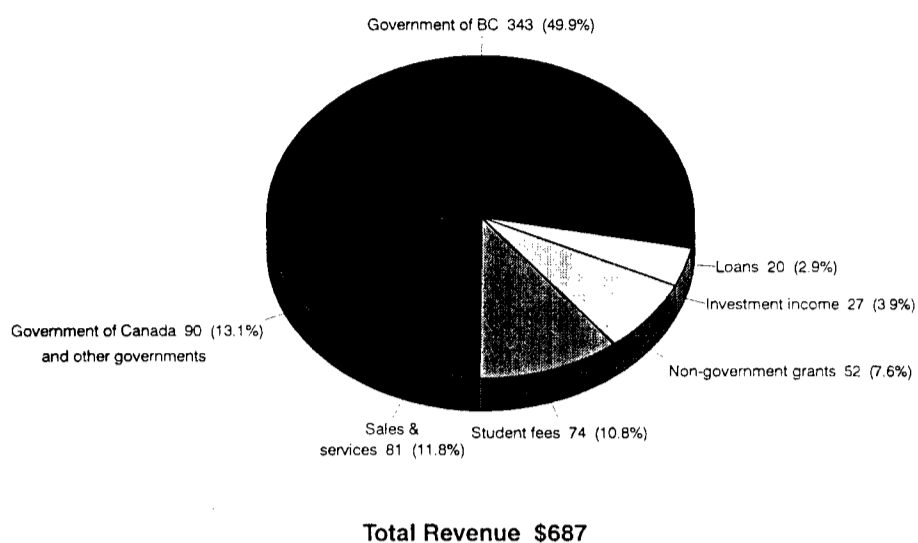
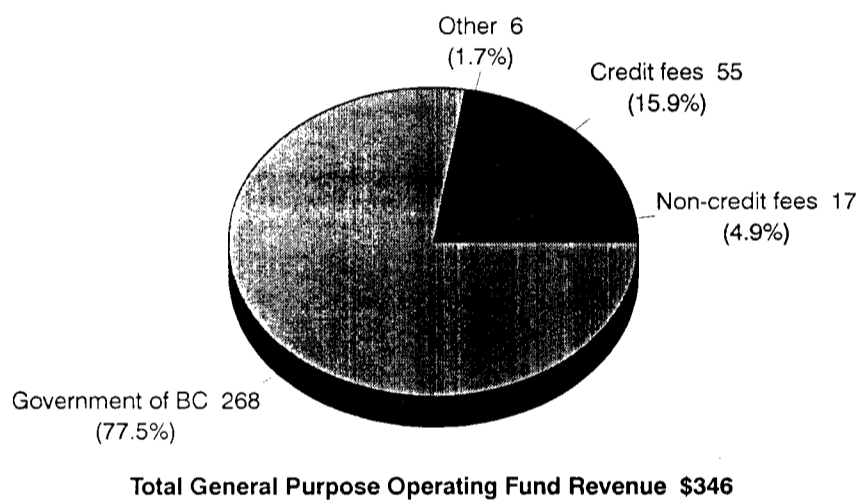


TABLE 4
General Purpose Operating Fund
Revenue by Source
for the year ended March 31, 1993
(millions of dollars)



recruited to support the new science and environmental studies program.

UBC faculty scholars won close to \$122 million in competitive peer-reviewed research grants in 1992/93. UBC continues to be ranked among the top three of the 31 Canadian universities obtaining funding from the national granting councils. UBC ranks number one in total research funding from Natural Sciences and Engineering Research Council (NSERC). It ranks number two in awards from the Social Sciences and Humanities Research Council (SSHRC), and number three in total Medical Research Council (MRC) awards.

The University has received \$6.3 million to use in 1993-94 for deferred maintenance. Deferred maintenance is major maintenance that has not been performed due to a lack of funding. It includes such projects as roof replacement, heating and ventilating system overhauls, road repair, painting, electrical and mechanical system repairs and flooring. The total estimated deferred maintenance at UBC is in the order of \$125 million.

The Main Campus Plan was

approved by the Board of Governors in January, 1993. The Plan is designed to evolve along with the University's needs and resources and specifically to address the main academic campus area. It is intended to act as an ongoing planning tool and as a set of guidelines that will allow buildings and landscapes to be constructed, maintained and preserved. The first draft of the South Campus Discussion Paper was completed in 1993. This document lays out a set of ideas to guide future development at the south end of the campus. The draft document is for discussion purposes only and will change as further public consultation continues.

The University is in an active stage of construction. Recently completed projects include: the School of Social Work, the First Nations Longhouse, the Student Services Building addition (new Brock Hall), the Nitobe Garden restoration and the West Parkade. Projects currently under construction include: Green College, the Centre for Integrated Computing Systems Research (CICSR), the Scarfe Building renovation/expansion, Thunderbird Student Housing and the Marine Drive Parkade. Projects to be started in the near future

include: the Morris and Helen Belkin Art Gallery, the Advanced Materials and Process Engineering Laboratories, C.K. Choi Building for the Institute of Asian Research, the Walter C. Koerner Library Centre Phase I and the Student Recreation Centre. The total value of construction is close to \$400 million with \$100 million currently under construction.

The UBC Real Estate Corporation is a wholly owned subsidiary of the University. The principal objective of the Corporation is to take responsible and pragmatic steps to make good use of the University's land holdings in the foreseeable future, in order to improve UBC's long-term capital and endowment programs.

One of the Corporation's projects is the development of the Hampton Place property at the corner of Wesbrook Mall and 16th Avenue, which is progressing well. The 86 unit Thames Court and 73 unit West Hampstead projects are essentially complete and fully occupied. St. James House, a 147 unit apartment style complex started in the spring of 1992, has sold very well and is also nearing completion. Recently, the corporation successfully tendered leases on two additional lots that will see construction of another townhome development and an apartment complex. The projects are scheduled to start in the fall of 1993 with construction over the next 12 to 20 months. The Real Estate Corporation is also overseeing construction of the 153 unit University Apartments Phase II project located off Wesbrook Mall. Completion of this project, including daycare facilities, is scheduled for the fall of 1993 and will bring the total inventory of apartments to 263.

Heightened environmental awareness has focussed increased attention and resources on environmental issues. The University is currently developing a formal UBC Environment Policy and a Sustainable Development Policy. Work is also underway to form an Environment and Safety Committee of the Board of Governors and to implement a campus wide program of environmental audits. The recycling Waste Reduction Program continues to reduce the amount of paper sent to landfills by an average of 25% per year. The recycling program will be expanded to include multi-material recycling programs at Acadia, Place Vanier and SUB. Already in place is recycling of glass, aluminum and newspapers at most Food Services outlets. A university hazardous waste minimization program was initiated in 1992. Activities over the past year focussed on solvent recovery, creating training programs and developing dialogue with the surrounding community on replacing the university's outdated hazardous waste incinerator. The solvent recovery project is jointly funded by the University and the Ministry of Advanced Education. The project draws on the participation of the university's Occupational Health and

Safety department, the Chemical Engineering department and the Sustainable Development Research Institute (SDRI). Also in process is planning for a campus chemical exchange and the development of waste minimization training and awareness programs. A Community Advisory Committee, representing over 20 university, community and special interest groups has been active in facilitating two way communication with the public relating to the upgrading of the incinerator. The incinerator project is currently on hold pending recommendations of the provincial Hazardous Waste Commission. Recommendations are expected in September 1993.

COMBINED FUNDS

Table 1 shows the total revenue and expenses of all five funds by object of revenue and expenses. Total revenue for all funds was \$686.8 million, up \$9.7 million from last year. Total salaries and benefits were \$400.3 million, an increase of \$21.1 million.

Table 3 shows the breakdown of total revenue by source. The Provincial government, through its general operating grant and through research and other direct grants provides approximately one half of the total revenue.

The University combines the operations of the UBC Real Estate Corporation, UBC Research Enterprises, the San Rafael Research Foundation, Cedar Lodge Society, Peter Wall Foundation, BR Centre Limited and the American Foundation in its financial statements. These operations generated revenues totalling \$8.7 million during the year. The Real Estate Corporation accounted for \$7.2 million of this amount.

GENERAL PURPOSE OPERATING FUND

Table 4 shows the General Purpose Operating (GPO) Fund Revenue by Source. The revenue and expenses used in the general operations of the University are accounted for in this fund. Operating income for 1992-93 increased over 1991-92 by \$12.4 million resulting primarily from increases in Provincial grants of \$8.2 million and credit student fee revenue of \$3.2 million.

Total expenses in the General Purpose Operating Fund were \$346.0 million. This is up \$13.4 million, with \$11.2 million of the increase attributable to salaries and benefits. The University's operating surplus for the year was \$2.0 million which cleared the operating deficit of \$1.3 million at the start of the year resulting in a surplus of \$0.7 million at the end of the year.

Table 5 shows a five year comparison of the per cent of funds spent on Academic and Support Services. It shows that the distribution between academic and support services has remained fairly consistent over this time period.



Table 5
General Purpose Operating Fund
Academic and Support Expenditures

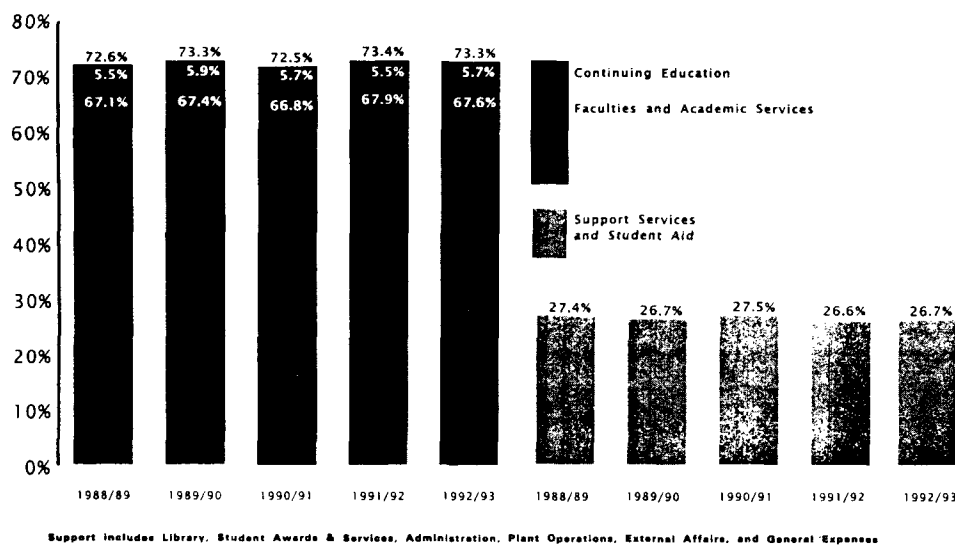


Table 6 shows a comparison of the number of full-time equivalent (FTE) students attending the University over the past five years. The FTE represents the number of students on campus expressed as a fraction of a full-time load. Both undergraduate and graduate FTEs have increased significantly over the past five years - undergraduates by 6.8% and graduate students by 41.5%.

The University enters a difficult year in 1993-94 with no increase to the base provincial operating grant and with many costs continuing to rise. The overall increase in General Purpose Operating income for 1993-94 will be approximately one per cent, with the largest share of the increase resulting from the 9.7% increase to tuition fees. The major increases to GPO revenue consists of funds committed to specific purposes, including pay equity of \$1.7 million and enrolment growth of \$1.2 million. Expenditures will increase overall due to inflation and specifically based on commitments made in the areas of salaries and benefits, utility costs, maintenance costs, student aid and library acquisitions. In order to sustain a balanced budget, budget cuts of \$6.9 million have been assigned. This represents a global cut of 2.5% on the salaries and benefits base and will result in a significant reduction in GPO funded positions.

SPECIFIC PURPOSES FUND

The revenues and expenditures for projects stipulated by donors and income earned on the Endowment Principal Fund are included in this fund. Trust Fund revenue was \$22.2 million and Endowment Fund investment income was \$17.4 million for a total of \$39.6 million. This is a decrease in total income of \$6.2 million from 1991-92. The majority of the decrease results from a \$2.1 million decrease in investment income in the Endowment Fund because of lower interest rates and a \$2.4 million decrease in funding from the Government of Canada.

SPONSORED RESEARCH FUND

Table 7 shows the Sponsored Research Fund Revenue by Source.

This fund includes amounts specifically identified for research grants and contracts or related activities as provided by government granting agencies, research institutes and other public and private agencies. Sponsored Research Revenue has increased from \$126.7 million last year to \$136.1 million this year. Of the \$136.1 million, the University distributed \$16.0 million to other institutions. These funds were distributed under agreements with the federal government, whereby the University is the administrative head of a network of research and a portion of the research is undertaken at other institutions and companies.

ANCILLARY ENTERPRISES FUND

Ancillary enterprises provide goods and services to the University community and are expected to operate on a break-even basis. Total income for the ancillary enterprises was \$80.3 million, an increase of 5.6% over 1991-92. Included are the Bookstore, Food Services, Housing and Conferences, Parking Services, the Tennis Centre, Athletics and Sport Services, UBC Press, Media Services, the Educational Measurement Research Group and Computer Maintenance and Telecommunications.

The Bookstore has decreased its accumulated deficit for the third year in a row by reducing expenditures and increasing sales. The Bookstore will have completed an extensive renovation by September, 1993 which will allow for better display and increased service.

The Department of Housing and Conferences is responsible for the operation of 11 University child care centres, student housing, the UBC Conference Centre and the University Apartments. There are 4400 spaces available for single student housing and 531 spaces available for family student housing. With the addition of Green College in 1993 and the expected completion of Thunderbird Student Housing in 1994, student housing capacity will exceed 6,000 students. This will fulfill the mission statement by providing housing for over 25 per cent of the full time

Table 6
Full-Time Equivalent Students

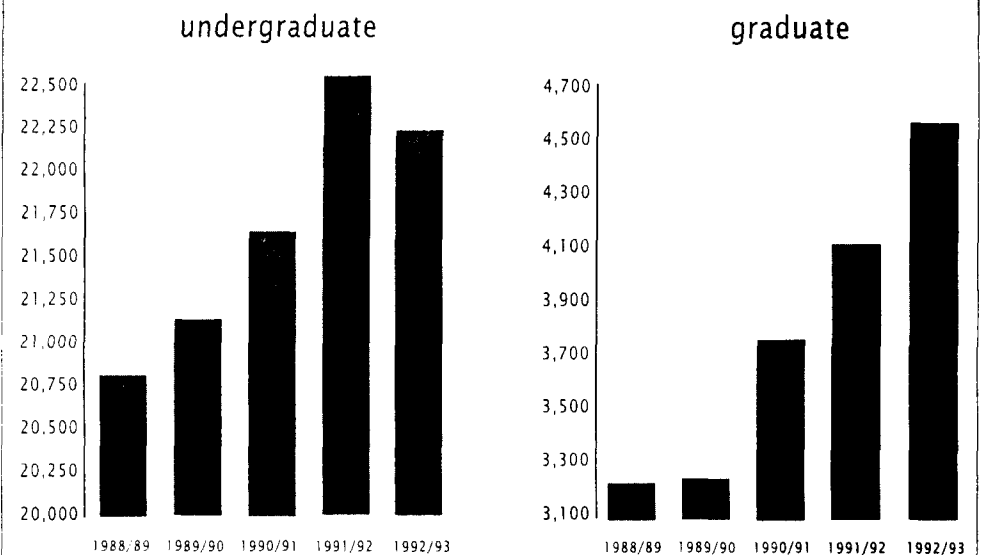
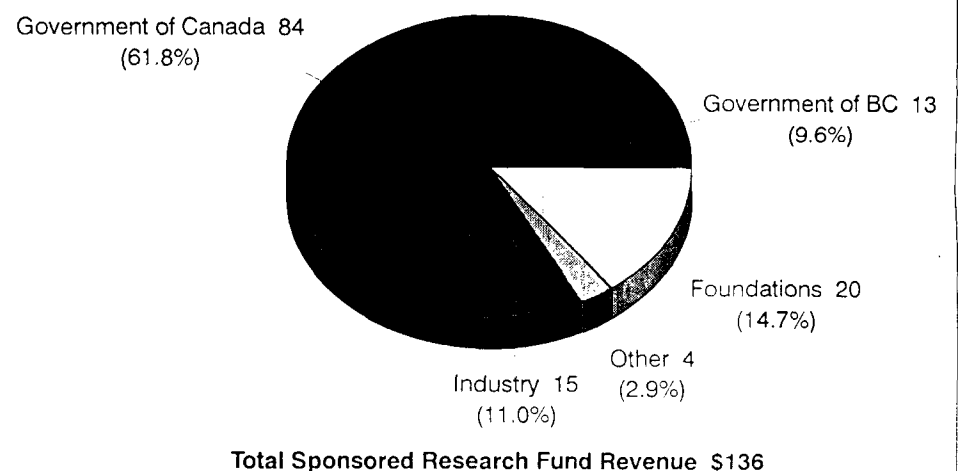


TABLE 7
Sponsored Research Fund
Revenue by Source

for the year ended March 31, 1993
(millions of dollars)



students 6 years ahead of the original goal of the year 2000. The University Apartments were built to provide temporary accommodation for newly recruited faculty and staff. The original two buildings, opened in September 1991, provide a total of 115 apartments. The second phase, expected to be completed in the fall of 1993, will add an additional 153 apartments. The policy on length of the rental term is restricted to ensure reasonable turnover. The turnover has been on target at approximately 30 per cent annually and to date, the Apartments have been operating at full occupancy.

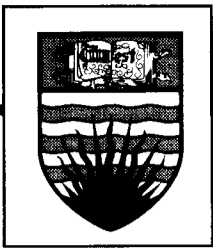
Parking Services has been progressing with its plan to replace lost surface parking with parkades. The existing surface parking space is needed for the construction of various academic and research facilities on campus. A fifth parkade on campus is currently under construction, the Marine Drive parkade. It is expected to be completed by the fall of 1994.

CAPITAL FUND

The capital fund consists of gifts, grants, interest and authorized

capital borrowing received for the purpose of acquiring capital assets including those pertaining to ancillary enterprises. Capital fund revenue decreased by \$10.3 million. This decrease is composed mainly of a decrease in Province of B.C. grants.

Expenses decreased by \$14.0 million, \$7.8 million of this decrease related to the building contract category, \$2.7 million related to a reduction in operational supplies and expenses and \$1.7 million was a decrease in furniture and equipment costs. The revenue and expenses are expected to increase next year due to extensive construction. Many of the capital projects are being funded through proceeds generated by the Major Campaign. Building projects completed during the year include the Student Services Building (New Brock Hall), School of Social Work, West Campus Parkade, First Nations Long House and Nitobe Garden restoration. Significant expenditures have also been incurred on the Centre for Integrated Computing Systems Research (CICSR), University Apartments Phase II and Green College which were all in progress at the end of the year.



THE UNIVERSITY OF BRITISH COLUMBIA

AUTONOMY AND ACCOUNTABILITY

Draft #4

September 16, 1993



THE UNIVERSITY OF BRITISH COLUMBIA

September 16, 1993

MEMORANDUM

To: Members of the University Community

Subject: Autonomy and Accountability document

The accompanying draft document represents one attempt to develop a UBC position on these important issues. This paper was originally presented at a retreat of the Board of Governors on June 17. It has since been modified in response to input from Deans, Heads and Directors.

I would appreciate receiving any comments on this material as a contribution to the dialogue now underway. The discussion of performance indicators and accountability is taking place at both the provincial and the national level. Comments by October 15th would be appreciated.

David W. Strangway
President

A. Autonomy

Universities value their autonomy immensely and for the past 800 years have, in general, used it wisely. Only fifteen organizations have existed for more than 800 years. These include the Catholic Church and the Parliament of Iceland; seven of the fifteen are universities. One of the principal roles of the university president and the Board of Governors is to protect the autonomy of the members of the community within their jurisdiction.

This autonomy operates on many levels, including autonomy from government. But, most important, is the autonomy for the teaching and research activities which are the mission of the university. Some people feel that this freedom of enquiry does not need protection, but we must be ever-vigilant. The university determines who will teach, who will be taught and what will be taught. In turn, this freedom is given to our faculty members.

Interventions into university autonomy continue on a regular basis. The following are a few examples:

- a) The Government of Ontario sought to have Professor Rushton of the University of Western Ontario dismissed. Although his teaching and research on racial issues was unacceptable to many, the test of his work must, in the end, be the marketplace of ideas.
- b) Government has sought to constrain the teaching of therapeutic abortion procedures in our medical school.
- c) The B.C. government has asked us to redirect our priorities in one area and has requested personal information on contracts under which individual faculty members are carrying out their research at UBC.
- d) I am regularly pressured by people in the community to "do something about David Suzuki." His controversial ideas will be assessed in the long run in the forum of public acceptability in a field of major significance.
- e) Provincial governments have, on more than one occasion (and by more than one government), expressed frustration with the existence and nature of Senates, and have threatened to abolish Senate by amending the University Act.
- f) Governments often attempt to intervene to cause us to direct our resources into areas that are of particular or personal interest to them.

We are a community of very diverse views and ideas and our collective role as board, president and senior administration is to respect and protect this diversity and to ensure its freedom. Some of the vehicles which are used to protect this freedom and to encourage our community of scholars to speak out are:

1) The Senate

This broadly-based body of academics, students and alumni is a key mechanism that ensures that the university has the freedom to teach what it collectively sees as crucial. From time-to-time, there are threats made to abolish the senates in our universities. This situation arises when bureaucrats and/or politicians are frustrated with their inability to redirect and control the activities of the university. The Board must be ever-vigilant to ensure that the Senate retains its freedom.

2) Tenure

Many see the tenure concept as an impediment to change in the university, but this is not the case. At UBC, we have a renewal rate of about 5% of our faculty per year. In the course of one four-year program, a student will find that 15% of his or her faculty members are newly-appointed. This is a healthy turnover and renewal rate and represents a good balance between stability and renewal. Furthermore, a process that does not make a final decision on ongoing employment until seven or more years after a Ph.D. is unique in society. Even in this process, the individual is tested for teaching ability and for research performance in the international community of scholars.

Tenure permits individuals to speak out and critique any aspect of society. Imagine a company or government agency protecting the job of an employee who is a consistent opponent or critic. That is why we have tenure: to promote, facilitate and protect discussion in our community and to be certain that the president or his colleagues cannot dismiss faculty critics.

3) Openness to publish the results of research

All of our research activities must remain fully open and faculty members must be free to publish the results. This openness is precisely the value that the university brings to research. Research can be done in governments or in companies, but, without the freedom, indeed the responsibility to publish, there can be no certainty that the results have not been controlled in some way by the corporation or the government. This is the basis for our credibility in research. We must not compromise this freedom to suit the desires of the patrons (government, corporations, donors, foundations, granting agencies). Without the autonomy to publish the results of research, the university would soon lose the uniqueness of its value to society.

In recent years, I have had the opportunity to seek briefs from the public on issues of the environment and economy. Many of the briefs expressed frustration over the processes of government and asked my committee to recommend that a process binding on government be created. This frustration derives largely from the secrecy and closed nature of the cabinet process by which most key decisions are made. This closed process of government decision-making contrasts sharply with the openness of the university processes, including the Senate and the Board, but also the many committees which will be reviewed later.

UBC values its autonomy and works hard to protect the independence of its community members. This does not in any way mean that we are not fully accountable for the wise use of the public money entrusted to us. The next section of this paper discusses the approach to value for money management used at UBC. There are many elements to our approach, but most important is the openness of information in our very open society. Unlike sponsoring governments, we have no particular ideology. We are a community of individuals with a wide range of beliefs and ideologies. This is our strength.

Have We Used This Autonomy Wisely?

The autonomy of the university to set its own agenda has been very wisely used by the university since its doors opened in 1915. Of course any given decision can be assessed and challenged by any particular interest group internal or external to the university. But our services have never been in greater demand.

- a) The recent Maclean's surveys of students show that 83% of university students (or clients) are either satisfied or very satisfied with their university programs.
- b) Surveys of graduates (two years after graduation) show overwhelming satisfaction with their programs of study.
- c) Demand for admission is rising at an incredible rate—from 16,000 six years ago to over 37,000 this year. Customer satisfaction must be out there.
- d) Donations are rising rapidly in response to our mission statement and strategic plan.
- e) Our research grants and contracts have risen rapidly. In science and engineering we are now number one in the country, both in total and in average grant per faculty.
- f) A recent Decima poll of teenagers across the country shows that we are considered by them to be one of the three best universities in Canada.

In today's complex world, for example, the demand for undergraduate liberal arts and science programs is rising rapidly. This is not surprising in view of the rapid changes taking place around us. No one can predict the skills that will be needed even four years from now, so students are choosing to develop broadly-based skills while governments are pushing in the opposite direction. In just a few years (usually less than it takes to graduate a class), governments have pushed for more teachers and for fewer teachers, for more nurses and for fewer nurses, and for more doctors and for fewer doctors. Is it any wonder that students are increasingly turning to broadly-based programs that develop generic skills and an ability to adapt to a complex world? But this is leading to an increased demand for specialization at the graduate or post-baccalaureate level. The trends of the past few years are clear and unequivocal. This pattern reflects what UBC does best, and is entirely consistent with the pressure from our clients.

Listed below are program changes made by UBC in response to our own perception of a) the changing needs of society; b) the changing demands of our students; c) our ability to deliver excellent programs based on existing strengths and; d) our ability to raise the resources from governments, from private sources and by redirection of existing funds (or a combination).



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AUTONOMY AND ACCOUNTABILITY

These changes are the programmatic changes, but, of course, the material that is taught in every faculty member's courses is constantly being changed and modified. In the 1920s, a course might be titled "Introduction to Physics." In 1993, the calendar title might be exactly the same, but you can be sure that the content of this course 70 years later is totally different and it will be different again in 1994.

Today there is increasing pressure for the use of technology to improve performance in all aspects of society. Technology is widely and extensively used in our research activities. In fact, in many cases, we are the developers of new technologies that are part of the future promise for British Columbia. We also have experimented with technology in the classroom. Experience in universities to date has shown that teaching can become much more effective, but in the end there have been no efficiencies or cost savings. Distance education has been very effective at delivering courses to those unable to attend face-to-face instruction, but this has not been cost efficient, since the delivery of courses on a unit full-time equivalent basis (FTE) is considerably more expensive through vehicles such as the Open Learning Agency and other distance education programs when they are when compared to university costs.

Vice-President, Academic and Provost

Academic Innovations

- Re-integrating disciplines, crossing boundaries to meet society's needs
- Collaboration with other institutions in B.C. and abroad
- 1. Undergraduate
 - B.C. has the best articulated college, university-college and university system in Canada
 - B.A. and B.Sc. at Okanagan and Cariboo Colleges, 550 students in 3rd and 4th year, 5,000 students in 1st and 2nd year
 - B.Ed. — post-baccalaureate for secondary teachers and mostly post-baccalaureate for primary teachers
 - B.Ed. programs offered in Cariboo College and in the Kootenays in joint ventures
 - Arts One broadened to include Asian and First Nations themes
 - Science One approved for 1993/94
 - Women's Studies major in Arts
 - Environmental Studies and Environmental Science in Arts and Science
 - Natural Resource Conservation — baccalaureate program
 - Aquaculture Option
 - Industrial Aerodynamics and Aircraft Engineering option
 - Dental Hygiene — diploma transferred to VCC; baccalaureate program introduced for outstanding college graduates
 - Nursing enrolment doubled in basic B.S.N. program through joint venture with VGH
 - Industrial Education — technical preparation portion transferred to BCIT; teacher education portion kept at UBC
 - First Nations Studies increasing; languages accepted for admission
 - Medical Laboratory Science — BMLS offered with BCIT-distance education
 - Academic Exchange and Education Abroad
 - 100 students per annum live and study at UBC from Ritsumeikan University; housed with 100 UBC students in a joint venture
 - 25% of Commerce students have some international experience
 - most active Canadian university in exchanging 3rd year students with dozens of leading universities abroad
 - will soon reach target of 5% with a year of study outside Canada for credit
 - We have recognized and given credit for advanced placement (this also helps to shorten student stays at university)

2. Graduate Programs

Landscape Architecture	magistral	(C)*
Biomedical Engineering	magistral	
Fire Protection Engineering	magistral	
Occupational Hygiene	magistral	(C)
Nursing	doctoral	
Agribusiness	magistral (in planning)	
Arts Administration	magistral	
Advanced Technology Management	magistral	
Law	doctoral (in planning)	
Medical Genetics	magistral and doctoral	
Medical Laboratory Science	magistral (in planning)	

Rehabilitation Medicine	magistral	
Pharm.D.	doctoral	
Pharmacy Administration	magistral	
Curriculum and Instruction	doctoral	
Exercise Science	doctoral (in planning)	
Health Care & Epidemiology	magistral and doctoral	
Experimental Medicine	magistral and doctoral	
Atmospheric Science	magistral	
Management Information Systems	doctoral	
Genetic Counseling	magistral (in planning)	
Stage & Screenplay Writing	magistral	
Policy Analysis & Strategy	doctoral	
Bioresource Engineering	doctoral (in planning)	
Vocational Rehabilitation		
Counseling	magistral (in planning)	(C)
Oral Medicine, Oral Pathology		
Oral Radiology	magistral	
Oral Biology	doctoral	

3. Research Institutes and Centres

Institute for Advanced Studies	(C)
Food Research Centre	(C)
Advanced Materials & Process Engineering Laboratory	
Centre for Integrated Computer Systems Research	(C)
Biotechnology Laboratory	
Media and Graphics Interdisciplinary Laboratory	(C)
Sustainable Development Research Institute	
Centre for Japanese Research	(C)
Centre for Korean Research	(C)
Centre for Chinese Research	(C)
Centre for S.E. Asian Research	(C)
Centre for S. Asian Research	(C)
Centre for Islamic Studies	(C)
Institute for Health Promotion Research	(C)
Centre for Health Services and Policy Research	(C)
National Centre of Excellence in Human Settlements	
National Networks of Centres of Excellence - UBC topped the country - only possible with provincial infrastructure support	
Centre for Applied Ethics	(C)
Fisheries Research Centre	
Institute for Conservation Biology	
Centre for Research on Women's Issues and Gender Relations	(C)
Race Relations Foundation - possible federal project	
School of Journalism	(C)
Geographic Information Systems (key element of western satellite EESI)	
Centre for Entrepreneurship and Venture Capital	(C)
Centre for Molecular Medicine and Therapeutics (Merck Frosst)	
Clinical Trials Centre	
Brain Research Centre	(C)

4. Graduate Residential Colleges

- Green College (with support from U.S.) (C)
- St. John's College (with support from PRC, Hong Kong, Taiwan) (C)

*(C) full or partial campaign support

5. Continuing Studies

Continuing Studies was fully reviewed and has been put on a full cost recovery basis (whether in a faculty or in the central unit) making it highly accountable to its client community. This community includes the units of non-credit programs and credit programs previously known as Guided Independent Study (GIS) and Extra Sessional Studies (ESS). The total level of activity is now over \$20 million/year and serves a very large population. About 80,000 people register for courses or programs. An external advisory committee provides ongoing advice to this activity.

The fundamental message is that we have used our autonomy well and we have a university that is very much in demand as a result of our own activities reinforced, of course, by support from government. We are well-received by our clients and by the various communities we serve, including the public at large.

But, of course, with this freedom and autonomy for the university and for its individuals, we do have an obligation to demonstrate to the public that we are using our resources wisely. This leads to the next section of this paper on accountability. Financial accountability has been exercised through audits by the provincial Auditor-General.

But, today, a wider definition of accountability is necessary. It is important to remind ourselves that this second form of accountability does involve explaining in transparent terms how we have used our autonomy wisely in reaching toward the vision contained in our mission statement and strategic plan. It does not involve determining whether we have adhered to any one interest group's demands or even whether we have accomplished what the government of the day has set as its social policy objectives. In this way then we are directly accountable to our clients and to the public.

B. Accountability or Value for Money Management

The University of British Columbia is a very large and complex organization. In fiscal year 1992/93 the university's total income was \$650 million and we employed



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AUTONOMY AND ACCOUNTABILITY

approximately 11,000 people, making us one of the largest private organizations in the province. About 55% of our income is provided by the province, so that a significant part of our expenditure is from the public of British Columbia. We operate without a deficit.

The University Act defines the university as a corporation and identifies the mechanism by which the Board of Governors is appointed: "The management, administration and control of the property, revenue, business and affairs of the university are vested in the board ..." In this sense, the Board is equivalent to that of a corporation. As in other large corporations, the Board delegates the management and operation of the corporation to the President who is the Chief Executive Officer of the university. In this role, the President, in turn, delegates responsibility to vice-presidents, deans and department heads in the academic areas, and to directors and others in the non-academic areas.

This view of the university as an autonomous, non-government agency was recently reinforced by a B.C. Supreme Court ruling. As stated in the first section, the university has used its autonomy well on behalf of the people of British Columbia.

Superimposed on this normal corporate model management structure is the Senate. The Senate is a body also defined in the University Act which is responsible for "the academic governance of the university." The President is chair of Senate.

This report documents the various forms of accountability that exist in the university. These forms of accountability are many and varied. They range from required fiscal auditing to periodic reviews of academic divisions, to complete reporting on budgeting and planning to the campus as a whole and beyond to the community at large. The University Act requires the university to operate on a fiscal-year basis without a deficit. Unlike private corporations, UBC reports very widely to its community and makes extensive use of external reviewers to assess the nature and quality of our programs, both academic and non-academic.

It is interesting to read recent books on management approaches. The common themes emerging are those which are laid out by Waterman and Peters in their landmark book *In Search of Excellence*. It can be noted that corporations are systematically adopting traditional university approaches which focus on the individual: "The best companies are those with a campus-like atmosphere." Today's term is empowerment, but that is the role that the university expects of each faculty member in his or her discipline. The flat organization structures that have always characterized universities are now being developed in governments and corporations as they "delay". From department head to president is four steps, while in government and corporations seven or eight levels are not uncommon. The central theme of universities is that boards and administrators are responsible for creating an environment in which outstanding faculty members can teach and do research most effectively, but without formal direction. In some universities, unionization has even been denied, because faculty members are seen as managers controlling much of their own activity.

The central thesis of UBC's approach to accountability is the very wide use of reporting to the campus as a whole and to the public at large. Some of these are legislative requirements, while others represent the current UBC management's approach to wide sharing of information.

1. The Auditor-General performs an annual audit of the university's financial statements.
2. These financial statements are made available to all departments and summaries are published in *UBC Reports* for the campus and for the broader public (started in 1988).
3. The administration consulted widely on and off campus in developing the mission statement adopted by the Senate and by the Board of Governors in 1989. In developing this statement, there was widespread opportunity for the public to comment in 1988 when a draft of the mission statement and strategic plan were released to the media. This document publicly communicates the overall goals and direction with which all areas of the university are charged.
4. The annual budget and planning document identifies the goals and objectives for each department, as well as measures of activity and progress in achieving these goals. Since 1989, this document has been published and distributed to the campus and to the public.
5. The *Bill 23* report, which is available to the public, provides a statement of remuneration and expenses paid to all personnel and a statement of total amounts paid to suppliers for goods and services. This is a published document in the public domain.
6. Every three years or so, the Open House activities invite the public to review the entire university. Hundreds of thousands of people see first hand every corner of the campus and the activities carried out.
7. All formal academic decisions are made in Senate in open and public session. The Senate represents many segments of the community and the academic debates are open to the public, including the media.
8. Unlike corporate boards, a major portion of all Board of Governors' meetings is open to all, including the media.
9. The university may well be the most open institution in society. Faculty members obtain tenure and are free to speak out on any issue without fear or concern. The media has ready access to all members of the university community, faculty, staff and students. Tenure and promotion are only awarded after an assessment of teaching and of research. The research is tested by the standards of the international community.
10. As part of the fund-raising campaign, we are approaching UBC's roughly

100,000 alumni. These people represent a broad cross-section of the public. Many, in increasing numbers, are donating. They would do this only if they had confidence in their alma mater. They receive information through the *Alumni Chronicle* and through the media. A few alumni express concerns about certain issues; in each instance we respond with information explaining the circumstances surrounding the issues raised.

11. A series of president's reports are distributed widely on and off campus. These reports result from extensive analysis of the areas covered and again represent comprehensive reporting on our plans. (UBC — "Engine of Recovery"; "The Library"; "UBC and Asia"; "The Creative and Performing Arts"; "UBC - B.C.'s Centre for Teaching and Research in the Health Sciences"; "Research in the Humanities and Social Sciences"—now in progress.)
12. No research that is carried out on campus is subject to restrictions (at most for one or two years) with respect to publication and to presentation at open meetings and conferences. This process of presentation and publication serves two roles as we address the question of "value for money" management. First, there are no secrets from the public; second, presentation and publication is subject to the peer assessment of international experts. Only good ideas will survive in the end through this process of accountability.

The present management at UBC believes strongly in these forms of public access to information and the accompanying accountability at its most fundamental level. Other than personal information about individuals, we have nothing to hide. Rather, we encourage an open society which is the essence of a university. The accountability is exercised through the Senate and the Board independently to the public at large. Consistent with this view, a 1991 task force was established in Ontario to develop recommendations for the clear accountability of the Ontario universities directly to the public.

Academic Programs

The central role of the university lies in its teaching and research programs. It is therefore important that UBC's value for money management be understood in this context. There is, of course, the traditional approach to management in which department heads must manage their department's resources effectively, in turn reporting to the deans (when appropriate) and then to the Vice-President, Academic and the President.

Any proposed changes in curriculum or programs must be reviewed and approved by Senate, a broadly-representative body. Senate has also established a policy that there shall be regular reviews of each department and faculty making use of external experts. In the mission statement and strategic plan, the section entitled "The Need for Constant Review" addresses and amplifies this approach. The action plan states "The university should continue to review academic units to obtain independent assessments. These reviews should be done on a regular basis, and in any event during the period immediately preceding the termination of a dean's or a head's term of office."

We have been implementing these comprehensive reviews on a regular and systematic basis, as can be seen in Table 1. It is in the departments and faculties that most of the university's funds are expended. We feel that this use of external reviews is an important element of university management, ensuring that the funded programs are indeed achieving excellence. External reviewers meet with faculty, staff and students as well as with senior administrators. Starting with the internal reviews from 1989 on, the Vice-President, Academic and the respective dean prepare a formal response to the external reviews as part of the planning process. The review and the response are then shared with the people in the academic unit involved.

In addition to the university reviews, many of our programs are subject to accreditation reviews (Table 1) by external professional bodies to ensure that these certification standards are being met by our teaching programs. These serve a somewhat different purpose than our own reviews, but they are nevertheless a strong form of accountability.

Advisory committees of external people meet on a regular basis to review and advise faculties, department, centres, programs, etc. (Table 2) and to brief the senior university administration on their findings.

Accreditations and Reviews

FACULTY OF AGRICULTURAL SCIENCES

UBC EXTERNAL REVIEWS

Department of Plant Science	1988
Department of Soil Science	1990
Department of Animal Science	1991
Department of Food Science	1993
Faculty	Planned

FACULTY OF APPLIED SCIENCE

ACCREDITATIONS

Engineering	CEAB; 1987; 1991
Architecture	CEAB - February 1986
Bio-Resource Engineering	Accredited for 3 years to June 30, 1994, CEAB
Nursing	RNABC - 5 years to 1992
Civil Engineering	CEAB - 6 years to June 30, 1994
Electrical Engineering	CEAB - 6 years to June 30, 1994



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Engineering Physics	CEAB - 6 years to June 30, 1994
Geological Engineering	CEAB - 6 years to June 30, 1994
Mechanical Engineering	CEAB - 6 years to June 30, 1994
Metals and Materials Engineering	CEAB - 6 years to June 30, 1994
Chemical Engineering	CEAB - 3 years to June 30, 1994
Architecture	1990 - Canadian Architectural Certification Board

UBC EXTERNAL REVIEWS

Department of Mechanical Engineering	1991
Dept. of Metals and Materials Engineering	1991
Department of Civil Engineering	1991
Department of Electrical Engineering	1992
School of Nursing	1992

Department of Mining and Mineral Process Engineering	1992
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FACULTY OF ARTS

ACCREDITATIONS

Psychology	(American Psychological Assoc., 1986; Canadian Psychological Assoc. 1987)
Doctoral Program in Clinical Psychology	Canadian Psychological Assoc. American Psychological Assoc. for 5 years, 1995/96
Internships in Clinical Psychology	Accreditation 1989
School of Library, Archival and Information Studies	ALA - 1985; 1988; 1990, 1992
School of Social Work	Can. Assoc. of Schools of Social Work 1990 for 7 years
Department of Psychology	Canadian Psychological Assoc. 1990/91 Through 1994/95

UBC EXTERNAL REVIEWS

Economics	1987
Geography	1987
Germanic Studies	1985
School of Social Work	1985
Philosophy	1988
Slavonic Studies	1989
International Relations, major & honours	1988
Department of Theatre	1990
Arts I Program	1990
Department of Linguistics	1990
Department of Asian Studies	1991
School of Music	1991
Department of English	1991
School of Family & Nutritional Sciences	1991
Department of History	1991
Department of Creative Writing	1991/92
Department of Fine Arts	1991/92
Department of French	1991/92
Museum of Anthropology	1991/92
Arts Advising Office	1991/92
Arts Computing Centre	1991/92
Department of Classics	1992/93
Department of Geography	1992/93
Department of Germanic Studies	1992/93
Department of Philosophy	1992/93
Department of Political Science	1992/93

FACULTY OF COMMERCE AND BUSINESS ADMINISTRATION

Faculty	1984
Faculty	1991

FACULTY OF DENTISTRY

ACCREDITATIONS

Canadian Dental Association DMD degree	7 years to Nov. 1996
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UBC EXTERNAL REVIEWS

Review on Instruction from Senate	1985
Oral Biology Ph.D. Program	1989
Department of Clinical Dental Sciences	1989
Dept. of Oral, Medical and Surgical Sciences	1989

FACULTY OF EDUCATION

ACCREDITATIONS

Counselling Psychology	to June 30, 1996
Council for Accreditation of Counselling and Related Education Programs	

UBC EXTERNAL REVIEWS

Counselling Psychology	1987
Administrative, Adult & Higher Education	1988
School of Physical Education & Recreation	1989

Dept. of Educational Psychology and Special Education	1989
Department of Social and Education Studies	1989
Visual and Performing Arts in Education	1991
Dept. of Mathematics and Science Education	1992
Department of Language Education	1992
Faculty	1992

FACULTY OF FORESTRY

ACCREDITATIONS

Forestry Accreditation	to 1995
Canadian Forestry Accreditation Board	to 1999

UBC EXTERNAL REVIEWS

Faculty of Forestry	1989
Department of Forest Sciences	1991
Dept. of Forest Resources Management	1991
Department of Harvesting and Wood Science	1992
Faculty	planned - 1994

FACULTY OF GRADUATE STUDIES

ACCREDITATIONS

School of Community and Regional Planning	
Planning Association; APA five years from September 1988	
Canadian Institute of Planners - M.A. and M.Sc. annually	

UBC EXTERNAL REVIEWS

Institute of Asian Research	1989
Institute of International Relations	1991/92
Westwater Research Centre	1992
Clinical Engineering Program	1991/92

FACULTY OF LAW

Faculty	1991
Law Clinic	1991/92

FACULTY OF MEDICINE

ACCREDITATIONS

Faculty of Medicine Accreditation	1986 for seven years (Royal College of Physicians and Surgeons accreditation of 47 post-graduate training programs)
Family Medicine Residency Training Program	College of Family Physicians 1991/95
School of Rehabilitation Medicine	
Can. Physiotherapy Association	Due 1993
Can. Assoc. of Occupational Therapists	Last accredited 1990/Due 1997
Faculty of Medicine Accreditation	In process - 1993 (Royal College of Physicians and Surgeons)
Master of Health Administration, Dept. of Health Care and Epidemiology	Due Dec. 1993, Association of University Programs in Health Administration

UBC EXTERNAL REVIEWS

Faculty	1989
Paediatrics	1985
Obstetrics and Gynaecology	1989
Department of Anaesthesiology	1991
Department of Medical Genetics	1991
Department of Medicine	1991
Department of Pathology	1991
Dept. of Pharmacology & Therapeutics	1991
Department of Physiology	1991
Department of Psychiatry	1991
Department of Biochemistry	1992
Department of Anatomy	1992
Department of Family Practice	1992/93
Dept. of Obstetrics & Gynaecology	1992/93
Dept. of Health Care & Epidemiology (graduate)	1988/1993

FACULTY OF PHARMACEUTICAL SCIENCES

Faculty	1990
Accreditation by Canadian Council on Accreditation of Pharmacy	due Sept. 1994

FACULTY OF SCIENCE

ACCREDITATIONS

Department of Chemistry	1988
Canadian Society for Chemistry Accreditation	

UBC EXTERNAL REVIEWS

Department of Oceanography	1986
Department of Chemistry	1987



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Department of Physics	1987
Department of Botany	1989
Dept. of Geophysics and Astronomy	1989
Department of Mathematics	1989
Department of Geological Sciences	1990
Department of Zoology	1991
Department of Computer Science	1992

ACADEMIC ADVISORY COMMITTEES

Agricultural Sciences

Food Industry Research Centre Advisory Council
Davidson Club (Botanical Garden)

Applied Science

Industrial Advisory Committee to the Department of Mechanical Engineering
Department of Metals and Materials Engineering Advisory Committee
Mining Industry Advisory Committee to the Department of Mining and Mineral Process Engineering
Civil Engineering Advisory Committee

Arts

The Adaskin Society (Music)
Advisory Committee on the new Art Gallery

Commerce

• Advisory Councils or Boards

Faculty Advisory Council
Bureau of Asset Management
The Financial Internship Program Advisory Council
Management Information Systems
Canadian Real Estate Research Bureau
Centre for Labour and Management Studies
Entrepreneurship and Venture Capital Research Centre
Advanced Technology Management Program
Centre for International Business Studies
Portfolio Management Society
Accounting Development Fund
Placement Centre
Real Estate Division

Education

Teacher Education Advisory Committee
NITEP Advisory Committee
UBC/West Kootenay Teacher Education Consortium
University College of the Cariboo/UBC Advisory Committee

Forestry

Forestry Advisory Committee

Graduate Studies

Media & Graphics Interdisciplinary Centre (MAGIC) Advisory Committee
Occupational Hygiene Program Advisory Committee
Sustainable Development Research Institute (SDRI) Advisory Committee
Westwater Research Centre Advisory Committee

In addition, the Editorial Boards of *BC Studies*, *Canadian Literature* and *Pacific Affairs* contain outside representatives.

Pharmaceutical Sciences

External Advisory Committee for the Faculty of Pharmaceutical Sciences

Science

Mineral Deposit Research Unit

Others

The First Nations House of Learning Advisory committee
Provost's Advisory Committee on Multiculturalism
President's Advisory Committee on Continuing Studies

The national granting agencies, for example, award research funds on the basis of rigorous peer review to people and groups that meet national or international standards. These panels often include people from industry. They are always amazed at the remarkably high standards applied to the decisions made. The process is far more rigorous than they have ever seen practiced in their own industries. UBC does extraordinarily well in these competitions as witnessed by the recent National Centres of Excellence program and the use of National Advisory Boards. Now, with \$120 million of research funds and roughly 1860 eligible faculty members, UBC brings in a large amount of funding to the province. This is far above the national average and represents an excellent measure of the achievements of individuals and groups.

The Canadian Institute for Advanced Research seeks out scholars across the country who represent the very best in selected fields and then supports these top-

notch researchers. UBC attracts more of this support than any other university in Canada.

These assessments are part of the ongoing evaluation of academics. They must provide value for money or they risk not having their grants renewed. If the university did not invest wisely in support of its academics, they would be unable to compete at such a high level of competence.

Of course there are many other checks and balances which operate in the academic sphere. Each faculty member is subject to an annual teaching review. There is a rigorous review process involving international assessments for appointments and promotion establishing a specific form of accountability. Each year there is assessment in connection with the merit awards. A protocol has been developed to ensure common and rigorous review standards across campus. Faculty members are very familiar indeed with measures of accountability. A major part of an academic's life is evaluation of performance. Faculty members are sensitive to these measures and are used to being assessed for teaching and research by the excellent methods of collegiality and peer assessment. They may not like the outcome of these processes, but they accept the results as valid and credible.

The Senior Appointments Committee at UBC is a unique body in Canada and provides the most rigorous scrutiny of all appointments and promotions processes in Canada. This committee, composed of all deans and of an equal number of senior academics, provides rigorous overview of standards.

The aggressive early retirement plan in place at UBC has been remarkably successful. Over 200 faculty members (more than 10% of the total) have chosen early retirement. Because of i) normal retirements, ii) funds for excellence in education, and iii) the early retirement scheme, we have been able to appoint 617 new tenure stream faculty since 1985/86. This level of renewal is truly remarkable as it means that nearly one-third of our faculty have been appointed since 1985.

There are many other ways to measure our accomplishments. There is a continual stream of prizes, awards and medals to UBC faculty members. We have, for example, received nearly a quarter of all the Steacie Prizes ever awarded by NRC. Our faculty members are frequently called upon to serve on panels, commissions, professional society executives, etc., both for national and for international bodies. There is scarcely a day in which a UBC expert is not quoted in the newspaper, on radio or television. From time-to-time, there are studies of various academic disciplines. UBC always shows up well in these analyses. For example, a recent report in *Science Watch* magazine (published in Philadelphia, USA) placed UBC as the fourth most cited university in Canada using a period that covered the dark days of 1983-85. Verbal communication with the authors of the study confirms that UBC is the most rapidly-improving university in Canada on this index.

Academic Support Services

About 70% of the university's operating budget is spent in the academic units. The remaining amount is spent in support services of many kinds, all of which are needed to provide a smoothly functioning infrastructure for the university. The university's administration costs remain among the lowest in Canada. Many actions have been taken to improve economy, effectiveness and efficiency in this area. Continuous improvement programs have been implemented in three areas as pilot programs for future similar activities. We have moved to decentralize a number of budgets to users so they can assess the effectiveness of the service provided as well as determine their own priorities for service levels.

Vice-President, Student and Academic Services

The position of Vice-President, Student and Academic Services was created in 1987. Table 3 shows a listing of reviews, advisory committees and users committees active in the past five years.

1. Academic and Administrative Computing

This unit supports all administrative and academic computing at the university. The Campus Advisory Board on Computing reviews overall policies in computing. The Centre was recently subjected to external reviews and major changes have resulted. Accounting software is being developed to permit all services to be charged out. Major restructuring was done in 1987. The operating budget was reduced as the unit became more service oriented. Savings were put into an ongoing capital fund for computer purchases (\$500 K) and into a development fund for networking. Furthermore, a decision has been made to move all of the unit's operating budget to the users by 1994/95, making the services offered fully accountable to its clients and to ensure that it can offer services on a competitive basis. This area will be subjected to an internal assessment and external review this year.

2. The Library

The Library has been the subject of a thorough review by a committee of inside users and outside experts. This report has recommended substantial changes in the way services are provided and increased attention to cost recoveries in areas such as photocopying, interlibrary loans, collections of fines and other activities. A new University Librarian has been appointed to be responsible for these changes. The external committee, known as Friends of the Library, sends briefs to the President's Office on the functioning of the Library, and the Senate Library Committee reports to Senate.

Units Reporting to Vice-President, Student and Academic Services

A. Reviews since 1986

1. Review to establish the Office of School & College Liaison, 1986
2. Review to separate School & College Liaison function from Student



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- Counselling & Resources Centre, 1986
3. Athletic & Sport Services—1986, 1987
4. University Library System—1988
5. Review of the Office of Registrar—1988
6. University Computing and Information Services—1989
7. Office of Women Students—1989
8. Review to Establish the Disability Resource Centre—1989-90
9. Review of UBC Press—1990
10. Review of Student Placement Services at UBC—1991
11. Accreditation Review of Student Counselling Services—1992
12. Review of Counselling and Related Services for Women Students—1993
13. Review of the Office of Registrar—1993
14. Review of Administrative Computing System (Planned for Fall 1993)
15. Review of the Disability Resource Centre, 1993

B. External Advisory Committees

1. President's Advisory Committee for Disability Matters
2. Advisory Committee for the Disability Resource Centre
3. President's Advisory Committee for the Library

C. Internal User Committees

1. University Athletic Council
2. Campus Advisory Board on Computing, functioning since 1987
3. Campus Advisory Board on Student Development—in process of establishing.

In addition, all major service units such as Administrative Systems, Athletics, Awards and Financial Aid, Computing Centre, Housing and Library have a number of user committees to advise on programs.

3. Media Services

Media Services has recently moved to a full ancillary basis and provides services to the campus on a cost recovery and competitive basis.

4. Networking and Telecommunications Services

Networking and Telecommunications Services provide full voice and data services on campus under the leadership of a new director. In 1987, UBC purchased its own telephone switching system, which saved \$800,000 a year compared to renting from B.C. Telephone. An additional saving of approximately \$900,000 a year will occur after the cost of capital equipment is paid off in seven years. Bulk contracts have been purchased for cross-border calls, giving special economies. The voice telecommunication service is now on a full cost recovery basis. In 1991, it was moved to a full ancillary status operating much as a utility. The data networking service has also been fully moved to ancillary status as of 1993/94.

5. The Registrar's Office

The Registrar's Office was reviewed in 1988 and again in 1993 with regard to its effectiveness by internal and external advisors. The Registrar has been implementing the changes recommended to make the office more customer-oriented. The Telereg system was installed in 1988 which modernized student registration and provides more effective delivery of services. This is enabling the office to provide even more effective service to students. These developments are under the scrutiny of campus-wide advisory committees.

6. The School and College Liaison Office

This office was established in 1986 combining activities from several other units. A full review of the service led to this reorganization. The director works closely with the faculties and with other student service units.

7. UBC Press

UBC Press exists primarily to publish academic books. It was turned into an ancillary in 1987 with a defined subsidy from the university. A full external/internal review has recommended major changes in the Press. A new director has been appointed and efficiencies introduced. It will be on a full cost recovery basis by the end of 1995/96. A publications committee and an advisory committee are ensuring an effective operation.

8. Athletics and Sports Services

Athletics was placed on an ancillary basis in 1987 with a defined subsidy. The program was fully reviewed in 1987. The review recommended i) that this unit be quite separate from the academic program; and ii) that a new position of Director of Athletic Facilities be created. The subsidy was removed in 1993 so they are now fully accountable to the users.

A new Director of Athletics and Sport Services has been appointed. A Director of Athletic Facilities has also been appointed. The University Athletic Council acts for the whole athletics area on an advisory basis to the vice-president. This council includes representatives from inside and outside the university. Increasingly, the facilities will be moved to an ancillary basis.

9. Awards and Financial Aid

The Awards Office will be the subject of a full review in 1993-94. The fundraising element of this unit has been moved to the Development Office, releasing resources and enabling it to be more responsive to students' needs.

10. The International Student Centre

Formerly called International House, the Centre has a new director and a

renewed mandate. The board of this unit involves outside advisors. This board has been redefined to be advisory to the Vice-President, Student and Academic Services.

11. Office for Women Students

The Office was recently reviewed and some changes to its approach to services offered were recommended. The Office will continue to offer counselling and other services to women students and coordinate its programs with Student Counselling. In addition, the Office will continue to play a significant advocacy role on campus on behalf of women students.

12. Student Counselling

The counselling office was recently reviewed and changes recommended. A campus-wide advisory board on student development is being established.

13. Student Health Service

The Student Health Service operates very nearly on a full cost recovery basis with a small subsidy from the university.

14. Student Housing and Conference Centre

Housing operates on a full ancillary basis serving students.

In order to assure a better, more coordinated approach to recruitment of new students, a pilot project involving the Registrar's Office, Awards and Financial Aid, Student Housing and the School and College Liaison Office was carried out this year. The success of this lays the foundation for a full on-site review of these activities to take place in time for the 1994 recruiting season.

15. Child Care Services

These units operate on a full cost recovery basis with close liaison with the parents.

Vice-President, Administration and Finance

A. REVIEWS

1. In the period 1984-90, one major external review and many internal management reviews brought major changes resulting in dramatic cost savings (over \$2 million in one instance of which \$1 million was reinvested in library acquisitions and management and other staff) and substantial reorganization of the administrative units reporting to the Vice-President, Administration and Finance. Most senior management positions are new appointments since 1985.
2. Neptune Dynamics Ltd. were engaged in 1984-85 to review the operation of the steam plant. The program involved an array of changes involving shutdowns during the summer, holidays, and week-ends; smart time clocks; a better balancing of the use of low pressure and high pressure steam; and upgrading of the condensate returns thereby reducing the amount of make up water. This program resulted in an annual savings of \$1.4 million.
3. A master plan study of Food Services has been completed which will determine the future planning of Food Service operations.
4. The Korbin Commission on Public Sector compensation conducted an external comparative review of the benefit and pensions areas at three B.C. universities. UBC was given the highest rating in terms of effectiveness and was the sole University which ranked an "A".
5. The Bookstore launched a customer survey program a year ago. The survey form, available throughout the store, invites all customers to respond to questions about service and selection and to give specific feedback or ask questions.
6. All departments undertake an internal annual review as part of the budget development process. This is true whether the review is to determine additional allocations or to apply cuts.
7. The University follows a practice of openness in publishing the operating budget in tabloid form. Similarly the audited financial statements are a public document provided to all departments, Senators, Board members, with copies available in the Library for general use. The Vice-President, Administration and Finance, publishes an annual report on the financial state of the University in UBC Reports for review by all members of the University community. Financial Services annually prepares the Bill 23 Report which is available to the public and which provides a statement of remuneration and expenses paid to all personnel and a statement of total amounts paid to suppliers for goods and services.
8. The Auditor General performs an annual audit of the University's financial statements. The audit report is available for review by the public.
9. Internal Audit has continued to be a strong respected force on campus. The department performs a professional evaluation and compliance testing of the University's internal controls, and carries on special investigations as required. In recent years, operational audits have been carried out leading to system and process improvements and savings. Table 4 outlines the internal audits conducted since 1986 and identifies the nature of each audit. Copies of Internal Audit reports are sent to the Auditor General and the Board's Audit Committee.



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Future Reviews:

It has been customary at UBC to conduct reviews of organizational units at times of significant change in organization or management. The incumbent Vice-President, Administration and Finance, will be retiring at the end of 1995. That will be an appropriate time to conduct reviews of all the units prior to a new person taking up the V.P. position.

B. ADVISORY COMMITTEES

1. Last year, each Director of Administration and Finance Departments made presentations to the Committee of Deans to acquaint members with their activities and budgets. In the upcoming tight financial times, it is felt that an increased level of liaison will be needed between the academic administration and the providers of services. To this end, a pairing of each Department with a Dean was implemented in April 1993. The Dean will provide an increased level of communication between the Committee of Deans and the service department.

2. **Campus Planning and Development**, because of its highly visible role both on and off campus, receives advice from a variety of sources. Externally, advice is provided via the public process, regulatory agencies, consultants, and the Ministry of Advanced Education, Training and Technology. Internally, advice is provided by the committees established for each capital project, the President's Advisory Committee on Space Allocation (associated with the Senate Academic Buildings Needs Committee), the University's senior administration and the Board of Governors.

3. Financial Services

The Financial Record System user advisory committee was set up in 1990 as a mechanism to control and manage the FRS Review Project. The group now serves to facilitate communication between Financial Services and key administrative users of the Financial Records System (FRS) on matters of common interest.

A Research Administration Users Committee is being established to serve as a forum for discussion of research administration issues and to make recommendations which will facilitate the development of effective support service.

4. Food Services

Totem Park and Place Vanier have Student Advisory Committees which consider and approve Food Services residence food budgets and proposed residence meal rate increases.

5. Human Resources

The operations and service levels provided by the pension staff are monitored by the respective Boards of Trustees of the UBC Faculty Pension Plan, and the Board of Directors of the Staff Plan. There is also an Investment Advisory Committee attached to the Staff Pension Plan.

Feedback and input from customer representatives in the employee relations area is provided through two sets of committees. These are labour relations committees and collective bargaining committees.

Personnel Generalists provide the front line support to enable departments to manage their human resources. To effectively assist the University departments, the Personnel Generalists are being moved from a central location out to the clients whom they serve.

6. Occupational Health And Safety

University Advisory Committees

- University Health and Safety Committee: Advises, assists and makes recommendations on health and safety-related policies and procedures, and ensures that the University follows all applicable statutory regulations.
- UBC Committee on Radioisotopes and Radiation Hazards: Manages the University's consolidated license for the use of radioactive isotopes, issued by the Atomic Energy Control Board.
- UBC Biosafety Committee: Reviews grant applications and research protocols involving biological agents to ensure they meet all current safety requirements for personnel and the environment.
- University Chemical Safety Committee: Manages global issues of chemical safety on behalf of the University. Reviews accidents involving chemicals, and where necessary, recommends modifications to procedures.
- University Diving Safety Committee: Recommends policies, procedures and standards for operations and equipment for faculty and students performing underwater diving.
- UBC Diving Control Board: Issues, reissues or revokes diving certificates; reviews and approves diving projects; reviews diving practices.
- Department/Area/Building Safety Committees: As required by the Industrial Safety and Health Regulations (or IH&S), the University maintains safety committees in all work areas. These are monitored by the Occupational Health and Safety Department and presently number 90 committees.
- Indoor Air Quality Committee: With representatives from Plant Operations, Campus Planning & Development, the academic departments, the unions, and

a physician, the mandate of this committee is to manage indoor air quality issues on campus.

- Chemistry Department Safety Committee: this Safety Committee represents one of the largest departments on campus, and is the one that handles the widest variety of hazardous materials. The Chemical Safety Officer is an ex-officio member.
- University Hospital Safety Committee, UBC Site: A member of the department sits on this Industrial Health and Safety Regulations-mandated committee.
- TRIUMF Safety Advisory Committee (TSAC): Reviews all occupational and environmental impacts of safety issues including radiation. Approves projects, sets policies associated with health, safety and environmental issues.
- President's Advisory Committee on Women and Safety: this committee was created to determine and examine issues of personal safety. Has a mandate to identify problems, seek solutions and increase awareness.
- UBC Occupational Hygiene Program Co-ordinating Committee: Oversees faculty coordination, resource allocation, academic rules and the direction of this new Masters level academic program.
- Asbestos Control and Training Steering Committee: A labour/management committee overseeing the safe handling, removal and repair of asbestos containing materials at UBC.
- Emergency Planning Steering Committee: Replacing the former Emergency Response Task Force, which formulated the University's Emergency Response Plan, this committee carries forward the next phases of planning in the event of a major emergency on the campus.
- Management and Skills Training Committee: Evaluating the need for management training in the University community, and making recommendations for an emerging program of management skills training.

7. Parking and Security Services

There is a wide variety of forums which receive information and provide advice on the operations of this unit. Among the major issues for which advice is sought are the following:

- Transportation Committee
 - development of efficient and effective means of transportation to and from UBC;
- Traffic Committee
 - the planning of traffic control and parking policies;
- GVRD Wreck Beach Advisory Committee;
- Advisory Committee for the Physically Challenged
 - common procedures to serve the needs of the physically challenged;
- President's Advisory Committee on Campus Safety
 - preventive measures for the protection and safety of women on campus;
- Emergency Response Steering committee
 - campus emergency and disaster policies
- Secure Access Committee
 - secure building access planning; and
- Museum Schedule Committee

8. Purchasing

The following is a list of major end-user Advisory Groups that we have established to assist in determining needs and the selection criteria for university-wide contracts:

- Courier Services
- Scientific Products
- Mail Services
- Photocopiers (duplex for double-sided copies)
- Plain Paper Fax Machines
- Blanket Order Turnaround Document (design and procedures)
- Travel Services
- Specialized Printing and Graphics Services
- Alternate Fuel for Vehicles

Through our newsletter, the Purchasing Periodical, we have conducted various user surveys, i.e., quality of courier services, etc. Various staff members are members of advisory groups such as the Campus Advisory Board on Computing, the Financial Services User Group, Computer Services Expert Partners Group.

INTERNAL AUDIT REVIEWS

Internal Audit's reviews have not been limited to financial controls. Audits have included economy, efficiency, effectiveness and accountability components. In addition to improvements to financial systems, recommendations have been made in the areas of operational budgeting, cash forecasting, credit management and general financial administration. Four audits in 1993 were devoted entirely to operational issues, focusing on cost savings, value for money and effectiveness. More of these operational reviews are planned.

Summary of Internal Audits since 1985

Audit	Date	Type	# of Recom.	Operational component (cost savings, value for money, effectiveness)
Office of the Registrar - Student Fee Testing	1986	compliance	12	
University Cash Policies and Procedures	1986	internal controls	12	
Student Health Services, Review of Billing Policy	1986	analysis	3	financial analysis of billing alternatives



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Audit	Date	Type	# of Recom.	Operational component (cost savings, value for money, effectiveness)	Audit	Date	Type	# of Recom.	Operational component (cost savings, value for money, effectiveness)
• Faculty & Staff Services, Employee Data Base Review	1986	internal controls	16		• Second Endorsement Review and Outstanding Cheque Review	1991	investigation	14	
• Financial Services - Accounts Payable Control Review	1986	internal controls	9		• Technexus International Corporation	1991	investigation	4	
• Faculty of Medicine Biomedical Communications	1986	internal controls	17		• Payroll Overtime - Management and Professional Staff	1991	compliance	0	
• Food Services - 99 Chairs Pub	1986	internal controls	27	recommendations to increase profitability	• Financial Services, Cheque Signing Control	1991	internal controls	0	
• Financial Services - Accounts Payable Processing Efficiencies	1986	operational	6	increased efficiency of invoice processing	• Physics - Investigation Admin. Office	1992	investigation	10	
• Purchasing Review	1986	internal controls	50	comprehensive recommendations to lower costs and increase effectiveness	• Ministry Funded Programs	1992	compliance	0	
• Faculty of Agriculture - Botanical Gardens	1986	internal controls	32	recommendations to increase profitability	• Telecommunications	1992	internal controls	9	
• University Industry Liaison Office	1987	compliance	0		• Media and Graphics Interdisciplinary Centre (MAGIC)	1992	compliance	0	
• Traffic & Security, Cash Handling Procedures	1987	internal controls	15		• John Hill Fraud	1992	investigation	9	
• Food Services - Subway Cash Investigation	1987	investigation	3		• Accounts Payable - Operational	1992	operational	15	economy and efficiency potential cost savings of \$84,000 per year
• B.C. Legal Aid - Form N Audit	1987	compliance	0		• Bookstore Freight and Customs systems	1992	operational	7	economy and efficiency potential cost savings of \$8,500 per year
• Physical Plant, Special Investigation	1987	investigation	0	analysis of expenses to ensure value for money on energy savings program	• Education - Audio-Visual Cash Audit	1992	internal controls	10	
• University Industry Liaison Office	1987	compliance	0		• Division of Medical Microbiology	1992	internal controls	33	streamlined procedures; improved administration of billing and fee recoveries
• Financial Services/General Accounting	1987	internal controls	37	increased economy of cash management	• Plant Operations	1992	investigation	5	
• Tennis Centre	1987	internal controls	54	improved budgeting and debt management	• Development Office - Information Systems	1992	operational	38	economy and efficiency potential cost savings of \$93,000 per year
• Development Office - ADVANCE System	1987	internal controls	24		• Animal Care Centre	1992	financial	27	improved budgeting, rate setting and financial reporting
• Library Processing Services - Acquisition system Review	1987	internal controls	6		• Civil Engineering - Investigation	1993	investigation	17	efficiency of accounting procedures
• Development Office/Financial Services, Donation Processing	1987	internal controls	6		• IHRIS - Financial Services	1993	internal controls	20	
• UBC Press - Reconciliation of Records	1988	analysis	14		• University Accounts Receivable	1993	internal controls	14	
• Development Office - Review of Accounting Procedures & Expenses	1988	internal controls	40	value for money on expense ie. travel style	• Electronic Data Interchange (EDI)	1993	internal controls	8	
• University Industry Liaison	1988	compliance	0		• Faculty Club Review	1993	operational	36	economy and efficiency potential cost savings of \$170,000 per year
• Athletics & Sports Services	1988	internal controls	32	budgeting; reduce cost of travel expenses	• Arts - Language Lab	1993	investigation	3	
• Financial Services - Contracts & Grants	1988	internal controls	17		• Housing - Child Care Services	1993	financial	37	operational cost effectiveness, potential cost savings of \$102,000 per year
• Financial Services Payroll	1988	analysis	13						
• Conference Centre	1988	internal controls	26	reduced cost of accounting records and review procedures					
• Development Office, Donation Processing Follow-up	1988	internal controls	13						
• Parking & Security, Cash Procedures	1988	internal controls	25	maximizing revenue from parkade					
• UBC Legal Clinic	1988	compliance	0						
• Geological Sciences	1988	internal controls	10						
• University Industry Liaison Office	1989	compliance	0						
• Faculty of Arts, Department of Music Investigation	1989	investigation	0	fraud investigation and recovery of \$ 160,000 from insurance					
• Student Housing - Financial System Review	1989	internal controls	21						
• UBC Legal Clinic, Law Society, Form 47	1989	compliance	0						
• Financial Services Endowment Investments	1989	compliance	0						
• Centre for Human Settlements Financial Analysis	1989	analysis	9	analysis of over expenditure and operational budgeting recommendations					
• Food Services - Subway Cash Investigation	1989	investigation	8						
• Financial Services Travel Advances	1989	internal controls	14	improved credit management					
• Financial Services Petty Cash and Change Funds	1989	internal controls	11						
• Media Services	1990	internal controls	17	general operational recommendations to meet financial objectives					
• Investigation, Dr. Gregory Lee	1990	investigation	4						
• UBC Industry Liaison	1990	compliance	0						
• UBC Demonstration Prototype	1990	compliance	0						
• UBC Patent Service	1990	compliance	0						
• Awards and Financial Aid, Works Study System	1990	compliance	9						
• Research Farm - Oyster River	1990	internal controls	14						
• Research Forests	1990	internal controls	7	improved administration of contract billing					
• Development Office - Gift Processing	1990	internal controls	13						
• Purchasing - Gasoline Credit Cards	1990	internal controls	5	increased efficiency of administration of cards					
• Major Account Reconciliation	1990	internal controls	0						
• Aquatic Centre	1990	internal controls	12	financial effectiveness, cost savings from integration of administration					
• Animal Science, South Campus	1991	internal controls	25	improvements in general financial management					
• ISM - Computer Security Access Review	1991	internal controls	16						
• Forestry Faculty	1991	internal controls	20	improvements in efficiency and effectiveness of administration					
• University / Industry Liaison	1991	compliance	0						
• Centre for Human Settlements	1991	analysis	20	improved expenditure control to prevent deficits					
• UBC Bookstore	1991	internal controls	113						
• Psycho-educational Research and Training Centre	1991	analysis	11						

Vice-President, Research

In the performance of research activities, the university is subject to a number of policies and guidelines that must be followed. These include items such as i) biohazard containment; ii) use of human subjects from an ethics viewpoint; and iii) use of animals. These issues are monitored on campus by university-based presidential advisory committees reporting to the Vice-President, Research. This position was created in 1986. Subsequently, we have appointed two part-time associate vice-presidents. The Canadian Council on Animal Care (CCAC) routinely visits our animal care facilities and advises us on deficiencies. For serious infractions, they have the right to close down operations (see Table 5 for a list of reviews, advisory committees and user committees).

The university is increasingly opening up links with business and industry through workshops, conferences and public reporting which generate interest in the value we provide them. Industry grants and contracts have risen from \$4.3 million in 1985/86 to \$14.6 million in 1992/93. In 1992, we listed ninety-four spin-off companies doing \$592 million in business. Patent disclosures have risen from twenty in 1985 to eighty in 1992. Our value in this sense is increasingly understood, in part through the effort of the University-Industry Liaison Office. This office assisted in bringing in contract overhead and royalty revenue amounting to \$1.5 million.

Table 5: VICE PRESIDENT RESEARCH

- a. Reviews in the past five years and planned for next two:**
- 1992 University-Industry Liaison
 - 1992 Animal Care Centre - Fiscal Audit
 - Annual reviews of Animal Care procedures through on-site visits from the Canadian Council on Animal Care.
 - 1993 Review of Office of Research Services in process.
- b. Advisory Committees:**
- Executive Committee for Research, chaired by the Vice President Research, comprises two advisory boards: The Social Sciences and Humanities Research Board, and the Natural, Applied and Health Sciences Research Board. The current membership is as follows:
- Natural, Applied and Health Sciences Research Board
- Keith Brimacombe, Metallurgical Process Engineering
 - James Hogg, Pathology
 - Maria Klawe, Computer Science
 - Paul LeBlond, Oceanography
 - Martha Salcudean, Mechanical Engineering
 - Olav Slaymaker, Geography
 - Geoffrey Scudder, Zoology
 - Michael Smith, Biotechnology Laboratory
 - William Unruh, Physics
- Social Sciences and Humanities Research Board
- Izak Benbasat, Commerce
 - Joost Blom, Law
 - Alan Cairns, Political Science
 - Sherrill Grace, English



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Daniel Overmyer, Asian Studies
David Robitaille, Mathematics and Science Education
Olav Slaymaker, Geography
Richard Tees, Psychology

c. User's Committees

Animal Care Committee
Biosafety Committee
Chemical Safety Committee
Radioisotopes and Radiation Protection Committee
Clinical Screening Committee for Research and Other Studies Involving Human Subjects
Behavioural Sciences Screening Committee for Research and Other Studies Involving Human Subjects
University Grants Committee, Humanities and Social Sciences
UBC-SSHRCC Travel Grants Committee
UBC-NSERC Equipment Grants Committee
Faculty Awards Committee

Vice-President, External Affairs

The Office of External Affairs was created in 1988 to coordinate the functions of the External Affairs units, i.e., Community Relations, Ceremonies and Development. It is also the liaison office with the Alumni Association which is funded by the university operating budget.

The Ceremonies Office has existed at UBC for some years, and in 1992 a new director was appointed, serving both the Ceremonies Office and the Community Relations Office. The Development Office is also relatively new, with a new director appointed in 1988. These units, together with the Alumni Association, have had a rapidly changing mandate. This has been assisted extensively by the use of on-site and off-site reviews. These reviews are conducted by external consultants and involve all the members of the units coordinated. These reviews have been of great significance in clearly establishing work priorities and timetables as problems are identified and solved (Table 6).

**Table 6: EXTERNAL AFFAIRS
Reviews in the Past Five Years**

1987	Burson-Marsteller Communications audit Development Office On-site Review (Myers)
1988	Development Office On-site Review (McCarthy)
1990	Development Office On-site Review (Myers) 75th Anniversary Review (Myers) Review of External Affairs Communications (Jones) Community Relations Review (Myers)
1991	President's Advisory Committee on External Affairs Review (Dove) Fundraising Review (Blight)
1992	Alumni Association* On-site Review (McCarthy)

* The Alumni Association is an independent association, whose volunteer board of directors is responsible for the direction and mission of the association and relates to the university through the Vice-President of External Affairs.

Reviews in the Next Five Years

Campaign Development Office On-site Review
External Affairs On-site Review

Advisory Committees - External

Eastern Campaign Leadership Committee
Western Campaign Leadership Committee
Chronicle Advisory Committee

Advisory Committees - Internal

Dean's Communication Committee
Development Office On-site Review (Myers)

Regulatory and Related Organizations

In the past three years, the university has created a number of new positions either in response to legislated requirements or in response to explicitly changing conditions in society to ensure that as an institution we are sensitive to these needs.

The Employment Equity Office was created to deal with federal requirements on contractors. We will be required to submit planned hiring goals for federal approval. The change is to provide opportunities for women, disabled persons, First Nations and visible minorities. There was widespread consultation before the office was created and there is an **advisory committee**.

A Multicultural Liaison Office was created to ensure that the university is sensitive to these needs. There is an **advisory committee** of internal and external people. The director of this office is chairing the President's Task Force on Racial Issues at the University.

The First Nations House of Learning was created to ensure that First Nations people had full access to UBC. This has an **advisory committee** of people from inside and outside the university.

The Disability Resource Centre is funded (except for utilities) on an endowment

basis at no net cost to the university. This office will play a strong advocacy role. It has a strong **advisory body** of people from inside and outside the university.

We have created the position of President's Advisor on Women's Issues and Gender Relations. A director and an **advisory committee** have been appointed.

In 1988, we developed a policy on issues of sexual harassment. This followed extensive work by a task force and the sharing of two drafts for the whole community to react to. This was published in *UBC Reports* (as are many such draft position papers) for all in the university and beyond to see. An office was created to implement the university policy. There is an **advisory committee** to this office.

A comprehensive human rights policy is under development for approval by the Board of Governors. These offices will be organized to ensure full compliance with the policy.

UBC has recently concluded lengthy and thorough negotiations with all faculty and staff groups for an innovative and progressive Employee and Family Assistance Program. The Program has been ratified by the University and all employee groups, and the selection of an external provider for this psychological health benefit is underway.

There are other university-wide issues being addressed by management as well:

1. *Environment and Recycling Issues*. There is a **task force** to develop policies on waste recycling. This task force includes members from the university community and from outside. We are fortunate, as we are in many instances at the university, in having campus expertise on the issues.

The task force has committees on 1) waste reduction - reuse and recycling; 2) special wastes; 3) research and develop markets; 4) education; 5) campus planning; 6) transportation; 7) conversion of UBC vehicles; 8) energy conservation; 9) food services operations; and 10) agricultural and composting. The task force is charged with developing a policy statement to bring forward an action plan to the Board of Governors.

Already we have received approved funding for a special waste facility. SERF (Surplus Equipment and Recycling Facility) is on a cost recovery basis. For example, we are actively involved in a paper recycling program that is substantially reducing dumping fees that are rising rapidly.

In order to ensure that we are conforming to provincial and federal regulations, we have recently recommended that the Board create a committee on Occupational Health, Safety and Environment. This committee reporting to the Board is another form of accountability in these key areas. We will create an Office of an Environmental Coordinator to develop the implementation of monitoring to ensure we are conforming to the relevant regulatory environment and to our recently approved environmental policy.

2. There are many organizations very closely tied to UBC but which do not directly report through management to the Board of Governors. In some cases, these bodies have in the past filed audited statements with the Board, but in many there has been no sharing of information. We have implemented a practice of bringing the financial records of all these units to the Board for information in its public sessions.

These include the following:

- a) Alumni Association - has its own elected board. As of 1990 it operates entirely on a grant from the university. All fund-raising has been transferred to the Development Office;
- b) Alma Mater Society - this body operates on the basis of fees collected by the university and income from sale of services—Board of AMS;
- c) Graduate Student Society—elected board;
- d) UBC Foundation - managed by a board of outside people—Lieutenant-Governor-in-Council appointments;
- e) UBC Real Estate Corporation - all members of the Real Estate Board are appointed by the UBC Board of Governors and include internal and community members; the president of this corporation has an **advisory committee** composed of university and community members;
- f) TRIUMF - this unit is presently unincorporated, but the principal partners, the Universities of Alberta, Victoria, SFU and UBC, are seeking incorporation—managed by a board;
- g) Bamfield Marine Research Station—board;
- h) Institute of Advanced Studies—board;
- i) San Rafael Foundation—board;
- j) American Foundation—board;
- k) Cedar Lodge Society—board; and
- l) Faculty Club—board.

Development of Formal Accountability Processes

As can be seen from the above sections, the university is subject to a very wide range of monitoring and scrutiny. This involves many formal processes at the national and local levels and many informal processes. But we are monitored, prodded and poked on a continuing basis. Every individual is also subject to a steady process of review. Academics are assessed by their students. They are assessed by their peers around the globe. The academic leads a relentlessly competitive life whether in research or in teaching or in publication review or for promotions and for merit assessments.

At the present time, there are many agencies examining the question of accountability indicators. AUCC and many universities are studying the question. The provincial government has asked the university presidents to develop a proposal. The Dupré report gives an excellent insight into accountability by reconfirming that we are funded on a weighted FTE basis. It reminds us that accountability in the universities



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is a two-way process. We must be accountable for what we do with what we have. But, of course, the funders must be accountable to provide a suitable environment for these activities. This is the hidden elegance of the Dupré report. Accountability is two-way.

I have reviewed hundreds of papers and reports on the question of university accountability in the past few years. The indicators I list in Table 7, if collected on a national and systematic basis, would make a very useful framework for accountability and for benchmarking our activities. We will continue to work on this topic at the B.C. University Presidents' Council to develop an approach to present to government this fall.

Conclusion

The university is not a government agency. It is a corporation as defined by the *University Act*. It has all of the normal accountability procedures that are used by corporations, including auditing and extensive financial controls to ensure that it operates without a deficit. On the other hand, unlike a corporation, we are a collegial institution in which all decisions are very open to comment and criticism. This openness is the very essence of the university and the process of dialogue and discussion on campus is extensive. Furthermore, in the past few years, we have moved strongly to provide information on all decisions to the campus and to the public. Imagine a private corporation publishing annually a 100-page detailed

budget and plan for the public at large to read.

This report has documented some of the many checks and balances in place at UBC, as well as a number of the major management initiatives undertaken in the past six years to ensure that the university is run on the basis of economy, effectiveness and efficiency. Many changes have been implemented. The university has undergone an extraordinary amount of change in the last few years. There has been an almost complete change of the university senior leadership and management positions in the last six years, including the President's Office, deans and virtually all new heads of administrative areas. These people have been vigorous in making changes. In the administrative units, there has been a major building of systems and functions.

The university has an extensive system of value for money management and of accountability already in place. These internal and external reviews, accountability systems and full disclosure of information are far in excess of anything comparable in existence in the business community, in publicly-headed corporations, or even in government agencies.

When teenagers across the country select UBC to be in the top three or four in every category, something must be right. When UBC tops the NSERC competition for 1992/93, we must be highly competitive. When our supporters are helping us to finish the largest fund-raising campaign in Canadian history, we must be seen as effective.

The following table of possible indicators for reporting to the Board is divided into input and output measures. In some cases, the indicators require an international frame of reference. Many are appropriate for a national comparison. It is probable that these comparisons should either be with the Group of 10 universities that have formed an association or with the reference group of research universities identified by *Maclean's* in its 1992 survey. Some indicators may be most useful provincially and still others may be of use only to UBC. Each of these indicators will require a table of the reference institutions (e.g. OECD countries, each province, the reference Canadian universities, the three B.C. universities).

Outputs

	International	National	Provincial	Relative to Selected Universities	UBC
1. MRC grants					
a) total			X	X	X
b) per faculty			X	X	X
c) % GPOF			X	X	X
2. NSERC grants					
a) total			X	X	X
b) per faculty			X	X	X
c) % GPOF			X	X	X
3. SSHRC grants					
a) total			X	X	X
b) per faculty			X	X	X
c) % GPOF			X	X	X
4. Other grants % GPOF			X	X	X
5. Contracts % GPOF			X	X	X
6. % National Scholars					
a) MRC			X	X	X
b) NSERC			X	X	X
c) SSHRC			X	X	X
7. % entering tenure stream faculty achieving tenure				X	X
8. % Steacie awards to UBC		X	X	X	X
9. % FRSC fellows		X	X	X	X
10. Fellows of the Canadian Engineering Academy		X	X	X	X
11. Undergraduate completion rate				X	X
12. Graduate program duration					
a) masters				X	X
b) doctorate				X	X
13. External Reviews--% reviewed on a 5-year timetable				X	X
14. Teaching evaluations; classes doing evaluations				X	X
15. Perception of graduates 2 years after graduation--use Statscan data					X

Background Reading

1. Prof. Ron Watts (former Principal of Queen's University), "The Future of the Universities", Transactions of the Royal Society of Canada, Series iv, Volume XXI, 1983, pp. 55-68.

2. Prof. David M. Cameron (Vice President, Dalhousie University), More than an Academic Question, The Institute for Research on Public Policy, 1991, pp. 437-457 (being Chapter 10, "Federalism, Public Policy and the Universities").

3. Mr. Gary Mullins, (Deputy Minister, Ministry of Advanced Education, Training and Technology), "Should Universities View Provincial Public Servants as Regulators or Allies?", in Cutt, James and Rodney Dobell (eds) Public Purse, Public Purpose: Autonomy and Accountability in the Groves of Academe, Institute for Research in Public Policy, 1992, pp. 277-283.

4. President David W. Strangway (President, University of British Columbia) "The Scope of University Accountability", in Cutt and Dobell, op. cit., pp. 243-257.

5. Mr. Gary Mullins, Notes for remarks at the Western Canada University Board Chairs Workshop on Strategic Planning, November 1, 1992 (7 pages).

Input

	International	National	Provincial	Relative to Selected Universities	UBC
1. Expenditures per capita population per GNP per student--ref. OECD	X	X	X		
2. Gross expenditure R & D per GNP (GVRD)--ref. OECD	X	X	X		
3. Participation rates, 18-24 year-old population	X	X	X		
4. a) \$/WFTE		X	X	X	X
b) \$/FTE--ref. OECD	X	X	X	X	X
5. Student faculty ratio					
a) total	X	X	X	X	X
b) graduate	X	X	X	X	X
c) undergraduate	X	X	X	X	X
6. Availability of provincial research infrastructure support			X		
7. Availability of equipment funding			X		
8. % space availability according to COU formula that is not slated to be demolished in five years			X	X	X
9. Tuition fees--Arts & Science	X	X	X	X	X
10. Space operating costs on a per square foot basis		X	X	X	X
11. New Faculty Appointment as a % of complement on a 5-year rolling average					
12. Library ranking--ref ARL (North America)		X	X	X	X
13. Library-total volumes		X			X
14. % General Purpose Operating Funds spent on acquisitions	X	X	X	X	X
15. Applications--total				X	X
16. Offers/application				X	X
17. Registrations/application				X	X
18. Registrations/offer				X	X
19. a) Average admission on grade				X	X
b) Arts				X	X
c) Science				X	X
d) Engineering				X	X
20. a) % Over 80%--total				X	X
b) Arts				X	X
c) Science				X	X
d) Engineering				X	X
21. % undergrads who are international				X	X
22. % grads who are international				X	X
23. Total spent on bursaries and scholarships from GPOF and endowment sources					
a) undergrad (% GPOF)				X	X
b) grad (% GPOF)				X	X
24. Equity goals					
a) faculty				X	X
b) staff				X	X
c) students				X	X
25. Total endowment funds				X	X
26. Endowment/GPOF				X	X
27. % alumni making gifts; 5 yr. rolling average				X	X
28. Number of students (undergrad) doing Education Abroad year				X	X
29. Administration and General expenses					
a) as a % of GPOF				X	X
b) as a % of total revenue				X	X
30. Academic unit expense as a % of GPOF				X	X

Calendar

September 19 through October 2

Notices

Disability Resource Centre

The Centre provides consultation and information for faculty members and students with disabilities. For more information about the Centre's services and programs, call 822-5844.

International Reachout Program

Student volunteers write letters to students intending to attend UBC, explaining life at UBC and in Canada, to ease the apprehension of international students. For information go to International House or call 822-5021.

English Language Institute Courses For Non-Native Speakers of English

Career/corporate courses evenings in: Reception/Telephone Skills; Interviewing/Resume Writing; Microcomputers; Adjusting To The New Workplace; Writing Messages. Call 222-5208.

Academic/Communication courses in Conversation, Writing and Grammar, Listening, Advance Discussion, TOEFL Preparation, Advanced Composition, Thesis and Article

Writing. Call 222-5208.

Professional Development for Language Teachers

Continuing Studies' English Language Institute offers practical workshops for teachers in: Drama/Improvisation, Using Video, Teaching Pronunciation, Incorporating Grammar/Writing. Courses begin Oct. 14. Call 222-5208.

Conversation Classes

Develop your conversational ability in French, Spanish, Japanese, Mandarin or Cantonese. 10-week sessions begin week of Sept. 28. Call Language Programs & Services, Continuing Studies, 222-5227.

TA Training Workshop

Instructional Skills Workshop For Graduate Teaching Assistants In The Faculty Of Arts. AERC, 5760 Toronto Rd., from 8:30am-4:30pm. Call 822-9149.

Waste Management Series Contaminated Sites/Toxic Real Estate

Sept. 30/Oct. 1. Two-day seminar that provides in-depth information on contaminated sites legislation, policies. Pulp & Paper

Research Inst. of Canada conference room from 9am-5pm. Fee: \$180, lunch provided. Call 822-3347.

Engineering Examination Tutorials

Evening series to assist applicants to prepare for APEGBC Professional Engineering Examination. Six consecutive Wednesdays beginning Sept. 8. CEME 1202 from 6:30-9:30pm. Call 822-3347.

Women Students' Office

Advocacy/personal counselling services available. Call 822-2415.

Fine Arts Gallery

Tues.-Fri. from 10am-5pm. Saturdays 12-5pm. Free admission. Main Library. Call 822-2759.

Male Experience Research Project

Are contemporary ideas about men's lives truths or stereotypes? Counselling psychology student is looking for volunteers to take part in this study. If you're straight, white, 25-35, and interested in sharing your story call Lawrence at 822-5259.

Sexual Harassment Office

Advisors are available to discuss questions or concerns and are prepared to help any member of the UBC community who is being sexually harassed find a satisfactory resolution. Call Margaretha Hoek at 822-6353.

Clinical Research Support Group

Faculty of Medicine data analysts supporting clinical research. To arrange a consultation, call Laura Slaney 822-4530.

Psychology Study

Looking for female volunteers who are experiencing sexual difficulties to participate in confidential research on sexual arousal. Honorarium. Call 822-2998, Mon-Thu 4-6pm.

High Blood Pressure Clinic

Adult volunteers needed to participate in drug treatment studies. Call Dr. J. Wright in Medicine at 822-7134/RN Marion Barker at 822-7192.

Statistical Consulting/Research Laboratory

SCARL is operated by the

Department of Statistics to provide statistical advice to faculty/graduate students working on research problems. Call 822-4037.

Surplus Equipment Recycling Facility (SERF)

Disposal of all surplus items. Every Wednesday, 12-5pm. Task Force Bldg., 2352 Health Sciences Mall. Call Vince at 822-2582/Rich at 822-2813.

Library Tours

For new and returning students. Tours of Main and Sedgewick libraries Sept. 20-24 at 10:30am and 1:30pm. Meet in front of main library. Call 822-3096.

Introductory Main Garden Tours

Every Wednesday/Saturday now thru to September 25 at 1pm at the entrance to Botanical Garden. Admission cost includes tour. Call 822-4208.

Nitobe Garden

More beautiful than ever after recent renovations. Summer hours 10am-6pm daily. Call 822-4208.

Soccer birds go for fifth straight championship

by Abe Heffer

Staff writer

Men's soccer coach Dick Mosher cringes just a little when he hears the word "dynasty" crop up in conversations about the UBC men's soccer team.

However, it's a word that's sure to be heard again between now and the end of the Canadian Interuniversity Athletic Union (CIAU) soccer season as the Thunderbirds open the 1993-94 campaign in search of their fifth straight national championship.

"There's something magic about the drive for five," admits Mosher, who is back behind the bench after a year off from coaching duties.

"Winning five straight championships seems to be the yardstick that clubs are measured against when the word dynasty is used to describe a team. Certainly, we're clear-cut favourites in the minds of many people to win our fifth straight, and that makes me somewhat uncomfortable."

Mosher's discomfort stems from the fact that soccer games are often decided by just one goal. And often a penalty kick can spell the difference between winning and losing a game, regardless of how well it is played.

"We've won a number of titles that could have gone either way," said Mosher.

"Fortunately, the veteran

players on this team know that nothing is automatic. We're not going to just walk on the field and win it. They do a good job communicating that to the younger players."

With assistant coach Dave Partridge guiding the team last season, the T-Birds beat the University of Victoria on penalty kicks and then were held to a string of one-goal games before beating McMaster University 3-2 in overtime in the championship game.

"Dave and his assistant, Ken More, did an excellent job of keeping the drive for five alive," said Mosher. "They had to work with a team that lost seven starters from the year before."

This season the Thunderbirds will field a team, beginning with their season opener Sept. 18 in Calgary, with three starters gone from their roster: Gord MacIntyre, Doug Schultz and Willy Cromack.

Some of the key recruits include four players from the Canadian national under-20 team: Ricky Hikita and Chris Franks from Richmond, Nico Berg from North Vancouver and Garrett Caldwell from Toronto.

Also joining the squad are Paul Dailly and J.P. Knezovic, who have played in the Metro Premier League in the Lower Mainland, perhaps the best amateur league in the country, according to Mosher.

One of the key returnees is



Steve Chan photo

UBC's Tom Kim (far right) defends against University of Victoria Vikings. The Thunderbirds take on Victoria Friday, Oct. 1 in the Homecoming soccer game at O.J. Todd Field.

Tom Kim, last year's most valuable player in the CIAU finals and winner of the Bobby Gaul Award as UBC's outstanding graduating male athlete. He is now pursuing a master's degree in Biochemistry.

"Tom is playing with a

tremendous amount of confidence. He's been getting a lot of playing time as a member of the Vancouver 86ers of the American Professional Soccer League and is one of the real keys to our club," said Mosher.

The Thunderbirds open their

home season during Homecoming Week on Oct. 1 at O.J. Todd Field against the University of Victoria. The game, which has a 3 p.m. start, will be preceded by a women's soccer match between UBC and UVIC beginning at 1 p.m.

Profile

Dr. Verity
Livingstone:

"It's not enough to give young mothers advice about how to breastfeed successfully. We need to develop a community that is supportive towards them, and that requires a large effort."



Martin Dee photo

In praise of mothers' milk

by **Connie Filletti**

Staff writer

The birth of her son James in 1981 presented Dr. Verity Livingstone with a dilemma. How could she breastfeed her newborn infant and continue her work as a scholar and physician?

Joining UBC the previous year as an assistant professor of family practice, Livingstone's academic curiosity, combined with her new role as a mother, propelled her towards learning first-hand how women managed a career and breastfed their babies.

She surveyed 400 female physicians in the province for insight about their experiences. It was the first step to developing what has become her major research area.

"I have four kids now and each one acted as a mini-laboratory," Livingstone says, only partially-joking. "Even though I discovered in the course of my research that good information was already available, it wasn't being put into practice."

Livingstone took the knowledge she developed and with the help of a small group of community nurses, established the Vancouver Breastfeeding Centre in 1986 under the auspices of UBC's Family Practice Dept.

Director of the centre since its inception, Livingstone estimates that one in 10 women in the Lower Mainland who chooses to breastfeed uses the services of the referral facility.

"Eighty-five per cent of mothers have made an informed choice to breastfeed. We're here to help these mothers do what they want and survive the barrage of negative comments," says Livingstone, the recipient of angry letters from individuals who believe that she is coercing women into breastfeeding.

She describes the volume of mail as

"non-stop" since a local community newspaper featured the centre early last month during Breastfeeding Week in B.C.

"One letter-writer said that the sight of a woman breastfeeding was worse than the most blatant pornography found in movies."

Livingstone attributes the negativity to a basic lack of knowledge regarding infant nutrition and health.

"The benefits of breastmilk to the baby include ideal nutrition, optimal brain growth and development and immunological protection against infections," she says. "Babies are more likely to be admitted to hospital in Canada with infection if not breastfed."

Formula-fed babies are also more likely to develop severe allergies, juvenile diabetes and are at increased risk for developing childhood leukemias, Livingstone adds.

The benefits women attain from breastfeeding include strong psychological bonding with their child, a reduced incidence of ovarian and breast cancer and a naturally effective method of birth control.

Livingstone also points out that breast milk is free, while the average cost of bottle feeding is about \$150 a month.

"It's not a lifestyle issue, it's a health issue," she says.

"But unfortunately the breast has a strong sexual connotation. Some people have a hard time separating that from its function. Women, too, have to overcome that stigma."

Livingstone discovered through her work at the centre that many health-care facilities and providers lack information about lactation physiology and breastfeeding management.

She believes that although mothers may choose before giving birth to breastfeed, their decision can be hampered by routine hospital practices

such as separating mothers and babies at night.

"When separated after delivery and given glucose water or formula, babies are no longer hungry and do not go to the breast. The cycle that triggers lactation is interfered with," Livingstone explains.

"Many physicians and nurses don't understand this very delicate mechanism. What is done within the first 48 hours either enables lactation to occur or impedes it."

A recent study by Livingstone indicates that teenage mothers in B.C. are at high risk for abandoning breastfeeding, many of them complaining about the conflicting advice they received from health professionals.

Her research suggests that one half of adolescent mothers start their babies on formula immediately following delivery.

"It's not enough to give young mothers advice about how to breastfeed successfully," Livingstone says. "We need to develop a community that is supportive towards them, and that requires a large effort."

Accepting the challenge, the Vancouver Breastfeeding Centre is in its third year of developing a training program for health professionals, providing them with up-to-date, consistent information on breastfeeding and lactation.

The program, supported by grants from the Vancouver Foundation and the Woodward Foundation, will soon include an instructional video being produced by lactation consultants at the centre entitled *The Art of Successful Breastfeeding*.

Livingstone's experience as an international advisor to UNICEF on lactation, and as one of very few internationally certified lactation consultants in Canada, leads her to expect that the video will help set world

standards for hospitals interested in establishing similar programs.

Closer to home, she is encouraged by the growing support of her colleagues for the work being done at the breastfeeding centre.

"There has been a complete turnaround in recognizing the importance of human lactation," Livingstone says. "We have to speak up for the babies. They deserve the best and nothing but the best."

Livingstone applauds the faculty at UBC's School of Nursing and the staff at Vancouver's Grace Hospital for their efforts to provide better services for mothers by maximizing their own expertise.

Funding, however, remains a major worry for Livingstone who hopes to raise enough money to relocate the centre from the cramped, obscure corner it currently operates from in the family practice unit at Vancouver General Hospital.

"The women who use the facility require a place of their own, a custom-made centre which will meet their special needs."

Another goal is to form an interdisciplinary advisory group to assist the province in developing a "baby friendly" program. She is collaborating closely with UBC's Institute of Health Promotion Research to implement the program, a joint initiative of the World Health Organization and UNICEF, which promotes and supports hospital-based projects designed to assist mothers with lactation.

For Livingstone, it's all in a day's work. This time, there's no doubt she can do the job.

"James is twelve years old now and my other children Felicity, Verity Claire and Andrew are 11, 9 and 5 respectively. Between them, I have seven and a half years of breastfeeding experience."

Introducing the Board of Governors

UBC's 15-member Board of Governors oversees the property, revenue and business affairs of the university.

The board, as set out in the University Act, comprises the chancellor, the president, eight persons appointed by the Lieutenant Governor in Council, two faculty members elected by the faculty, two full-time students elected by the students and one person elected by and from the full-time employees of the university who are not faculty members.

All governors are eligible to serve for a maximum of six consecutive years in three-year increments. Student members of the board, although eligible to serve six consecutive years for as long as they remain full-time students, must be elected on a yearly basis.

The 1993 members of UBC's Board of Governors are:

THOMAS BERGER Berger, a Vancouver lawyer and former B.C. Supreme Court justice, was appointed to the board in 1992. A UBC graduate, he received his BA and LLB from the university in 1956. Active in the New Democratic Party during the 1960s, Berger was an MP in 1962-63, an MLA from 1966 to 1969 and served as provincial leader of the party in 1969. He has headed several royal commissions including the Mackenzie Valley Pipeline Inquiry. Berger holds honorary degrees from 12 universities and was made a Freeman of the City of Vancouver last year. He received the Order of Canada in 1990.



Berger

SHIRLEY CHAN Chan, manager of the non-market housing division of Vancouver's Housing and Properties Dept., was appointed to the board in 1992. Educated in Ontario and B.C., she received a master's degree in environmental studies from Toronto's York University in 1978. Chan has served as a private consultant and as an environmental and community planner. She was the chief of staff to the mayor of Vancouver between 1981 and 1986 and executive assistant to the president of BCIT in 1987-88. Chan was recently elected chair of Vancity Savings Credit Union.



Chan

BARBARA CROMPTON Crompton, founder and president of The Fitness Group, was appointed to the board in 1990. The Fitness Group specializes in exercise, nutrition and stress-management programs in the commercial and corporate sectors. A graduate of UBC (BEd '72), Crompton received the Maxwell A. Cameron Award in her graduating year for academic excellence and most outstanding teaching performance in the Faculty of Education. She is a director of the Vancouver Board of Trade and a board member of IDEA, a 30,000-member organization of fitness professionals.



Crompton

WILLIAM CULLEN A professor of Chemistry, Cullen was elected by faculty to the board in 1992. He received his BSc and MSc at the University of Otago, New Zealand and his PhD at Cambridge University. Cullen joined UBC's Chemistry Dept. in 1958. He is a former chair of the Faculty Club board of directors and a past president of the UBC Faculty Association. Cullen has been the recipient of two Killam senior fellowships, and is a member of the Chemical Institute of Canada and the Royal Society of Canada.



Cullen

RONALD GRANHOLM Granholm, president and CEO of Computrol Security Systems, was appointed to the board in 1987. He graduated from B.C.'s Institute of Chartered Accountants in 1959, specializing in general and financial management. He received an MBA from Simon Fraser University in 1972. Granholm is past chair and governor of the Business Council of B.C. and is active with the Vancouver Art Gallery. He is a past director of the Vancouver Board of Trade, B.C. Transit and the Metropolitan Transit Operating Company.



Granholm

ARTHUR HARA Chair of Mitsubishi Canada Ltd., and chair of UBC's Board of Governors, Hara was appointed to the board in 1987. A Vancouver native, he attended Kobe University of Economics in Japan and is a graduate of the Advanced Management Program of the Harvard School of Business Administration. He also serves as chair of the Asia Pacific Foundation. Hara was elevated to Officer of the Order of Canada in 1992. He was presented with an honorary LLD from UBC in 1990.



Hara

MICHAEL HUGHES Hughes, a PhD candidate in laser and plasma physics, was elected by students to the board in 1993. A native of Victoria, B.C., Hughes received his undergraduate training at Queen's University in Kingston, Ont., before completing a Master of Applied Science degree in physics at UBC.



Hughes

He is actively involved with the Alma Mater Society's student council and Global Development Centre, and with the graduate student council. He has served as a member of several activist groups and was instrumental in organizing protests against tuition fee increases at UBC in 1992.

ROSLYN KUNIN Kunin, executive director of the Laurier Institution, was appointed to the board in 1993. She was educated in Quebec and Ontario before receiving a PhD in Economics from UBC in 1970. Kunin was a visiting assistant professor in agricultural economics at the university in 1972-73, before joining Employment and Immigration Canada as a regional economist where she has served for the past 20 years. Her volunteer activities include chair of the Vancouver Economic Advisory Commission, chair of the Vancouver Crisis Centre and vice-president of the YWCA. She has received the Crystal Ball Award from the Association of Professional Economists of B.C. on several occasions for forecasting the Canadian economy.



Kunin

ORVIN LAU A fourth-year computer science student, Lau was elected by students to the board in 1993. He served for three years as a member of UBC's Senate where he co-chaired an ad hoc committee on teaching evaluation. He also was a member of Senate's committee on academic policy, the ad hoc committee on the environment for teaching, and several other Senate appointments. Lau is currently a director of the Alma Mater Society and a member of the Campus Computing Advisory Board. He is the recipient of a number of honours, including two Duke of Edinburgh awards presented to him in 1986 and 1987.



Lau

ROBERT LEE Chancellor of the university, Lee is a UBC graduate (BComm '56) and president of Prospero International Realty Inc. He served two terms as a member of UBC's Board of Governors prior to becoming chancellor, and was founding director of the UBC Foundation. Lee currently serves as a member of the leadership committee of A World of Opportunity, the university's fund-raising campaign. In 1990, he was invested as a Member of the Order of B.C. and was honoured with the Businessperson of the Year Award that same year.



Lee

TONG LOUIE Chair and CEO of H.Y. Louie Co. Ltd., Louie was appointed to the board in 1990. A UBC graduate (Agriculture '38), Louie is also chair, president and CEO of London Drugs Ltd., and vice-chair and director of IGA Canada Ltd. He was named Entrepreneur of the Year for B.C. in 1987 and was presented with the Outstanding Community Volunteer Leader Award by the YMCA of Greater



Louie

Vancouver in 1988. Louie was named a Member of the Order of Canada in 1989 and was presented with the Order of B.C. in 1991. He received an honorary LLD from UBC in 1990.

LOIS MOEN Moen, an administrative clerk in the Faculty of Medicine, Dean's Office, Postgraduate Education, was elected by staff to the board in 1993. She has held her current position since 1989 after joining UBC a year earlier as a clerk in the Telecommunications Dept. Moen has served as a shop steward for CUPE 2950 for the past five years, sitting on the union local's executive as chief shop steward since 1992. She is an active volunteer in numerous community associations and political organizations.



Moen

MICHAEL PARTRIDGE Regional vice-president of employee benefits for London Life Insurance Co., Partridge was appointed to the board in 1991. A UBC graduate (BComm '59), he has served as vice-president and president of the UBC Alumni Association and was co-chair of the David Lam Management Research



Partridge

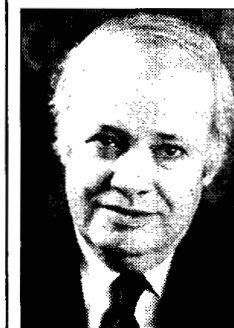
Endowment Fund. Partridge received the Blythe Eagles Volunteer Service Award in 1987 and was a recipient of the 1990 UBC Alumni 75th Anniversary Award of Merit.

DENNIS PAVLICH Pavlich, a UBC professor of Law, was elected by faculty to the board in 1990. He received both his undergraduate and LLB degrees from the University of Witwatersrand in Johannesburg, South Africa before graduating from Yale University Law School with an LL.M. degree in 1975. Pavlich has served as an attorney of the Supreme Court of South Africa and as a member of the Canadian Association of Law Teachers. His research and scholarly activities include real property law.



Pavlich

DAVID STRANGWAY Strangway became a member of the board upon being appointed president and vice-chancellor of UBC in 1985. The son of medical missionaries, he attended school in Angola and Rhodesia before entering Victoria College at the University of Toronto in 1952 where he earned undergraduate and graduate degrees in physics. Strangway was a faculty member at the University of Colorado and at the Massachusetts Institute of Technology before joining the Physics Dept. at U of T in 1968. In 1970, he became chief of NASA's Geophysics Branch, responsible for the geological aspects of the Apollo missions.



Strangway



Condomania

John Chong photo

Radio hotline host Rhona Raskin was dispensing more than advice to UBC students during a visit to campus on Sept. 8. Raskin, with help from 10 student volunteers, distributed 1,500 condoms in about 30 minutes to the noon-hour lunch crowd outside the Student Union Building. It was all part of a campaign promoting the importance of using condoms sponsored by the Vancouver Health Dept.

Classified

The classified advertising rate is \$15 for 35 words or less. Each additional word is 50 cents. Rate includes GST. Ads must be submitted in writing 10 days before publication date to the UBC Community Relations Office, 207-6328 Memorial Road, Vancouver, B.C., V6T 1Z2, accompanied by payment in cash, cheque (made out to UBC Reports) or internal requisition. Advertising enquiries: 822-3131.

The deadline for the Sept. 30, 1993 issue of UBC Reports is noon, Sept. 21.

Services

ATTENTION FOREIGN STUDENTS! Need help with your written English? Experienced writer/editor available to turn your theses into concise, grammatically-correct, and stylish texts. Prompt, reliable service, backed by 12 years' international experience, at very competitive rates. For free estimate and consultation, call: 737-0622. French and Italian translation service also available.

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Miscellaneous

ARTROPOLIS '93 needs volunteers available during the day for the weeks before spectacular opening on Oct. 22. Old Woodward's building. Call Ruth 689-5811. Variety of skills required.

STOP ASSAULTS! Call Tough Lady Products as seen in Maclean's magazine, Vancouver Sun, BCTV. Personal, burglar and car alarms. Call Myra 645-0412.

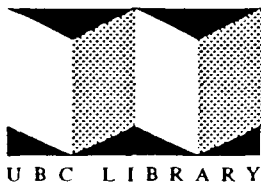
Accommodation

VISITING PROFESSOR at Centre for Research in Women's Studies and Gender Relations requires accommodation for the period January to June 1994. Two bedroom for accompanying child and dog preferred. Contact 822-9173 for further details.



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September 1993



NEW FINES POLICY & IMPROVED CIRCULATION SERVICES

The Library has a new circulation system and fines policy. Here's a guide to what's new:

IMPROVED ONLINE CIRCULATION SERVICES

- ➔ Up-to-the-minute circulation information
- ➔ Self-service renewals
- ➔ Self-service listing of items you've signed out

NEW FINES POLICY

- ➔ Automatic fines for all overdue materials
- ➔ Fine rates are:

Regular loans	\$1/day
Reserve loans	\$1/hour to a maximum of \$5/day
Max. late fine	\$30

For more information about the Library's loan policies, please pick up a copy of *Guide to Loan Regulations* at any UBC Library.

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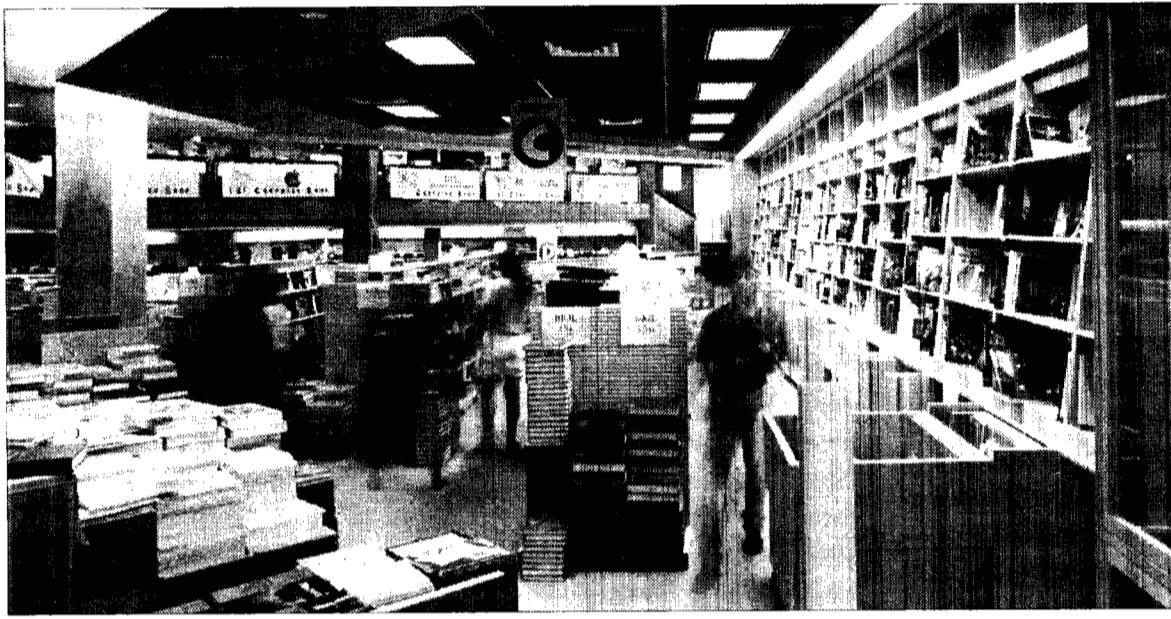
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CANADA'S LARGEST UNIVERSITY CONFERENCE CENTRE



Martin Dee photo

New And Improved

Phase one renovations at the UBC Bookstore are almost complete and include additional lighting, increased visibility and access to the merchandise areas in the centre of the store. The bookstore will have an official grand re-opening Oct. 20th. Phase two of the renovations begins in April.

Safari encourages healthy diet

by Connie Fillelli

Staff writer

Healthy eating is in store for you. In the local grocery store, that is.

That's why shopping safaris through the aisles of local supermarkets are being planned by the Student Health Outreach Program for UBC students interested in learning to shop for economical, tasty and nutritious foods.

"Our aim is to educate students about choosing and enjoying nutritious foods while living on a low budget," said Shirzad Kassamali, a fourth-year dietetics student who led a pilot safari in April.

Kassamali designed, implemented and evaluated the

project as her guided independent study with the Student Health Outreach Program.

She believes that the shopping safari can help students identify and correct any misconceptions they may have about food labels and nutritional claims and introduce them to a variety of new products which they may want to incorporate into their daily diet.

Scheduled to begin this month, the 90-minute supermarket tours will feature tips on shopping for convenience foods, meat alternatives, frozen foods and making inexpensive but nutritious selections from the four food groups.

A booklet has been produced by Kassamali, in co-operation with the Student Health Outreach Program, as a

supplemental guide for students who participate in the supermarket tours.

Margaret Johnston, UBC's Student Health Outreach nurse, is planning to offer shopping safaris every week. Ten students can be accommodated on each tour.

Johnston said that although there are community-based shopping safaris which primarily promote heart health, the UBC initiative focuses on the specific needs of a student population.

"Many students experience a transition phase between living at home and living independently," Johnston said. "Our program teaches students how to eat well without costing them more time or money."

To register for a safari, call 822-7011.

People

by staff writers

Edward Piers, a professor in the Dept of Chemistry, is the winner of the 1994 Canadian Society for Chemistry's Alfred Bader Award for excellence in research in organic chemistry.

Piers will receive a cash prize of \$3,000. As well, he will present a lecture at the annual Canadian Society for Chemistry Conference and Exhibition to be held in Winnipeg next May.

His research involves the discovery and development of new methods in organic synthesis and their application to the total synthesis of structurally novel, biologically active natural products. He also investigates the stereoselectivity and chemoselectivity of selected organic reactions.



Piers

•••••

Prof. Peter Larkin recently received the Carl R. Sullivan Fishery Conservation Award from the American Fisheries Society.

The award is given annually to an individual or organization for outstanding contributions to the conservation of fishery resources.

An internationally recognized expert on the management of fisheries resources, Larkin is a professor emeritus in Zoology and Resource Ecology and also chairs the Royal Society of Canada's Research Evaluation Unit at UBC.

He received the award at the society's annual meeting held last month in Portland, Oregon.



Larkin

•••••

Commerce and Business Administration Prof. **Izak Benbasat** is the recipient of the MIS (Management Information Systems) Quarterly Distinguished Scholar Award.

The award recognizes significant long-term research contributions in the field of information management and is the highest recognition in this field given by MIS Quarterly.

MIS Quarterly will award a \$1,000 scholarship to a graduate student of Benbasat's choosing.



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May 13	Bangkok (sightseeing)		
May 14	Bangkok		
May 15	Fly Bangkok / Singapore (transfer to Marco Polo)		
Cruise Schedule			
May 15	Singapore		embark overnight
May 16	Singapore		6.00pm
May 17	Port Kelang (Kuala Lumpur), Malaysia	8.00am	7.00pm
May 18-19	Cruise South China Sea		
May 20	Ho Chi Minh City (Saigon, Vietnam)		10.00am overnight
May 21	Ho Chi Minh City		5.00am
May 22	Da Nang (Hue), Vietnam		7.00am 10.00pm
May 23	Cruise South China Sea		
May 24	Canton, China		8.00am 7.00pm
May 25	Hong Kong		disembark
Post-Cruise Hong Kong			
May 25	Hong Kong (sightseeing and transfer to hotel)		
May 26	Hong Kong		
May 27	Hong Kong		
May 28	Hong Kong / Return to Vancouver		

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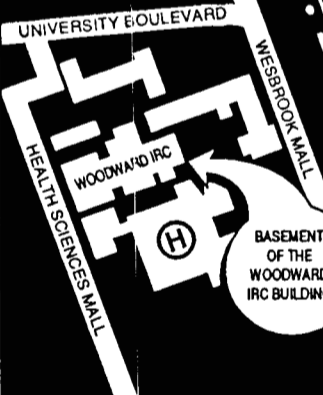
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A conversation with Daniel Birch

As vice-president Academic and provost, Daniel Birch is UBC's senior academic administrator and oversees a budget that accounts for 70 per cent of the university's total operating fund. His primary responsibility is the allocation of resources and working with the deans to achieve their plans and goals.

UBC Reports recently sat down with Birch to discuss issues facing the university, including teaching, access to the post-secondary system, the changing role of education and the future direction of academic programs.



UBC Reports: Access to post-secondary education is of concern to educators well as to the public. What is UBC's role among B.C. post-secondary institutions in providing access for the growing numbers of people demanding entry?

Birch: Beyond providing an excellent and sometimes innovative education to a large number of undergraduates and a growing number of graduate students, UBC's contribution lies in our continued efforts to make degree programs available throughout the province through partnerships with university-colleges. I think this is one of the success stories of the last few years — the degree completion programs in the regional colleges. They have great appeal to people who are concerned about the expense of moving away from home and offer assurances that there are good quality programs close to home. The demand is huge.

Sometimes people hark back to a supposed golden age when anybody who wanted to go the university could go to university, but in those days we talked about a BAC degree — bounced at Christmas. A very large proportion, sometimes as many as 40 per cent of students failed their first-year English in the good old days. Was that evidence of an outstanding undergraduate program? I'm not sure.

UBC Reports: Are these university-colleges intended to evolve into free-standing universities?

Birch: They will in the next very few years. The legislation is already in hand to give them the right to grant degrees and it's a question of reaching the point where the mechanisms for academic governance are in place in those institutions and both the university-college and ourselves are comfortable with cutting the umbilical cord.

In the span of a very few years we will have gone in B.C. from three universities and the Open Learning Agency to as many as 11 degree-granting institutions. BCIT is almost certain to obtain degree-granting status, Emily Carr College of Art and Design may, at least five of the university-colleges will become quasi-independent degree-granting institutions and, of course, UNBC will soon be in full operation.

UBC Reports: So that should take some of the enrolment pressure off UBC?

Birch: One would assume it would

take some pressure off us, but look at what's happened in the Okanagan. The number of students coming into first year at UBC from Kelowna is less than it used to be, but it hasn't gone down at all in terms of numbers of students from Penticton or Vernon. Transfer into second- and third-year programs at UBC is actually up from the university-colleges from what it was before.

Another trend is the number of students coming from other provinces. Ontario, particularly, has gone up quite significantly. What's happening is that UBC has become a national institution.

UBC Reports: There is a perception that UBC is evolving into a research-intensive institution at the expense of undergraduate programs. How do you respond to that?

Birch: Well, I don't agree with that at all. Some people are inclined to define research and teaching as if they were in competition with each other. Sometimes they are in competition for a faculty member's time, but they also reinforce each other. One of the things I find very refreshing at UBC in the last two or three years is an increasing attention to teaching, the development of teaching skills and the recognition of teaching through prizes. For example,



this fall the Science faculty is initiating a Science One program — an integrated program which is a really creative approach to teaching and curriculum. I take this as further evidence that there is a fairly general resurgence of an interest in and commitment to high quality teaching at UBC.

UBC Reports: In what other ways is UBC working to strengthen its teaching programs?

Birch: There are several ways. As a result of a recommendation made by an ad hoc Senate committee, I report to Senate each year when there are any evaluations of less than satisfactory teaching. As it turns out, it is a very very small proportion of cases where an instructor is seen as less than satisfactory. When it does happen, we often find that somebody was assigned to a course which really didn't match their particular strengths. Some people are very good lecturers, other people are better in small groups, some are very good with introductory students and others are better with more advanced students. While you want to be fair in parcelling out loads, you also want to take advantage of the strengths different people have.

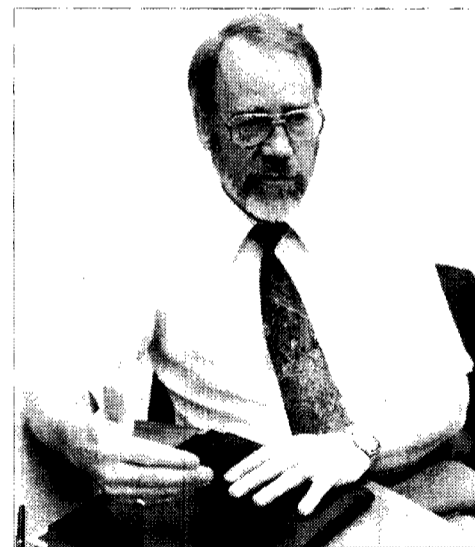
Sometimes if an individual has not done very well, it is suggested they consider getting into a discussion or dialogue about teaching, and in a number of instances, this has been very helpful. In about one-third of the cases where teaching has been evaluated as less than satisfactory, the individual has not been reappointed. I think that says something very important about how seriously teaching is taken at UBC. Some faculties, Commerce being one of them, actually post all of the teacher evaluations so

they're available to students.

As I've previously mentioned, it wasn't long ago when we had a failure rate as high as 25 to 40 per cent in first-year English and we had a significant failure rate in second-year English as well. What created this difficulty and remains a challenge in teaching first year English today is the diversity of our student body. We've responded to this challenge by creating the University Writing Centre and providing special learning opportunities for students who require it. We have dramatically reduced failure rates and that's not only because we have more serious students, it's also because we see quality of education bound up not with how many students you fail, but how many students have been challenged to succeed.

UBC Reports: There is a public perception that post-secondary education needs to be revamped in order to respond to the changing needs of society. Do you agree with that perception and if so, what is UBC doing to meet those needs?

Birch: It's a reasonable question — one we should be constantly asking ourselves. The best way we can contribute is to give people the abilities of critical thinking and problem solving and some significant knowledge of their heritage. Those students are capable of bringing much more meaning to their own lives, making decisions and continuing to learn. We should be graduating people who have some sensitivity to cultural differences, who have some awareness of moral and ethical issues and the ability to address them. And we should be concerned about people living ethically, not just able to earn a living well. Universities went through a period in which it was very important to



demonstrate they didn't stand in loco parentis, they weren't carrying out a parental responsibility. We see all kinds of evidence today that we are taking more seriously the ethical as well as the intellectual responsibility we have towards students. I believe that education is fundamentally a moral enterprise.

UBC Reports: Some feel that we should be teaching students job skills, rather than a strictly academic curriculum.

Birch: There's no question you shortchange students seriously if you just focus on skills relevant to a particular job or a particular job market at a given point of time. Most of us have probably said, "I learned more on the job — in terms of specific job requirements — than I did in university." This is as it should be. Having said that, I don't object to giving students a set of skills which will

enable them to learn the specifics of any given job and that's what many of our professional programs do. But if we set out to put a major emphasis on the specific skills, we turn out graduates with skills that are obsolete by the time they are employed. It sounds glib and as though one is evading a responsibility to take that position, but I believe it very strongly.

UBC Reports: What other trends do you see shaping and challenging post-secondary education in coming years?

Birch: There was a time universities had a monopoly on intellectual activity and advanced teaching. In an information age, that is no longer true. We have lost our monopoly, but it's not something we should mourn. We are now able to make strategic alliances

with other institutions in society and this will make for interesting developments both in research and in teaching. We have seen some steps in that direction in research activity — in the Industry Liaison Office and an increasing integration of basic research, applied

research and even commercialization of findings. We're going to find it increasingly in education, as well.

One of the areas where it is obvious is in a professional field like medicine. The Faculty of Medicine is developing a plan called Medicine 2000 for building coherent, focused research programs — research programs which we couldn't begin to do on our own — to take advantage of the complementary strengths in the various teaching hospitals. By working together in strategically planning teaching, research, and clinical programs in those hospitals, we can become a powerhouse in bio-medical research. This is going to happen in many other fields, too, although I don't know what forms it will take.

In some programs it may involve overseas experience, not just with similar universities elsewhere, but with corporations or professions. I'm looking forward to the exploration of these strategic relationships. They will multiply the impact a university can have. We can't live in isolation.

UBC Reports: What new academic programs are being planned at the university?

Birch: UBC is in a position to build on its strengths in many fields. For example, the proposed journalism program takes the somewhat radical notion journalists ought to know something in depth, and not just have a set of technical skills. We can offer a program which draws on our considerable depth in fields such as political science, history and other related fields. Similarly, the fund-raising campaign has generated for us a whole series of new endowed chairs related to Asian research. They will not be dropped into a vacuum, but rather they are coming into a context in which a very large number of people are already engaged with Asian research. Adding this increment enables us to build relationships among various fields. Another example is that we are the first university in Canada to approve a PhD program in law. Here again it's based on the notion that study at the most advanced level can take place in the context where law is not isolated, is not alone, but related to the social sciences, particularly. It's that kind of thing that comes out of the comprehensiveness and the commitment to building on strengths.

"I believe that education is fundamentally a moral enterprise."

- Daniel Birch