

# UBC REPORTS

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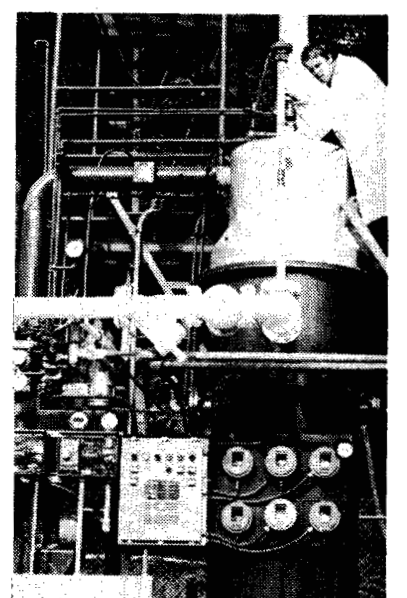
**Third Troisième  
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2037  
VANCOUVER, B.C.



**Indian Education**  
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# GAMES KIDS PLAY

See Pages Two and Three

## Vancouver Buses

Vancouver Buses is a game designed to follow bus routes in the city of Vancouver.

### Rules:

1. To play Vancouver Buses a single die is used by each player. No more than six players can play in one game.
2. The player rolling the highest number starts the game. The player with the second highest number goes next and the other players follow in order.
3. Once the order of playing is decided, the starting player rolls to determine the number of squares he will move.
4. Two or more players may land on the same square without penalty.
5. In order to complete the game a player must roll the number representing the exact number of squares he must move to get to the Kootenay Loop.
6. Special Squares

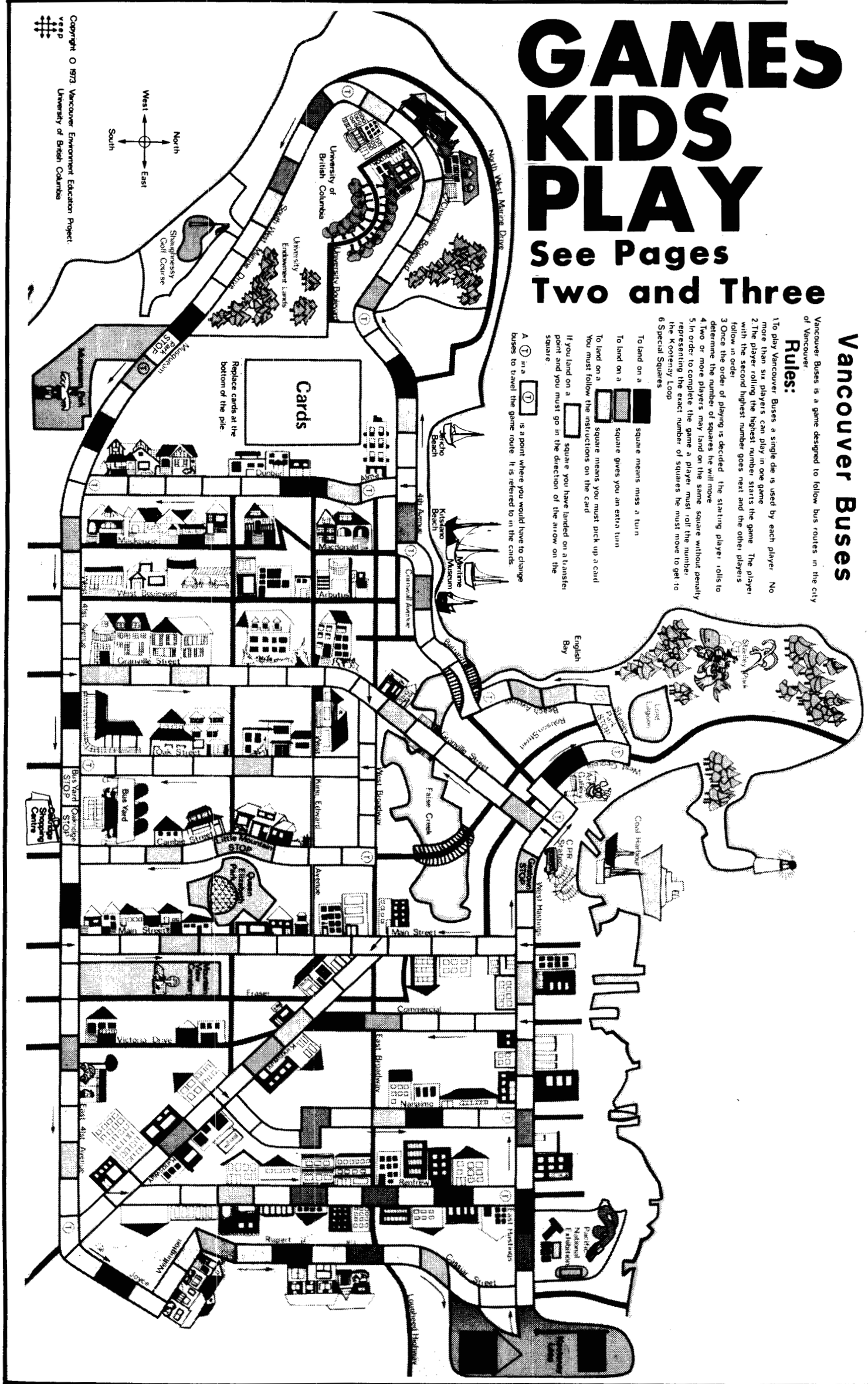
To land on a square means miss a turn.

To land on a square gives you an extra turn.

To land on a square means you must pick up a card.

If you land on a square you have landed on a transfer point and you must go in the direction of the arrow on the square.

A in a square is a point where you would have to change buses to travel the game route. It is referred to in the cards.



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University of British Columbia

# VEEP RE-INVENTS THE BUS

By John Arnett  
UBC Reports  
Staff Writer

For a generation of youngsters who consider the automobile the only form of transportation, Prof. Cliff Anastasiou and his colleagues in the Vancouver Environmental Education Project at UBC may very well have re-invented the bus.

They have devised a unique game called Vancouver Buses, one of 23 teaching units related to the Vancouver environment produced over the past 18 months by VEEP, originally organized by Prof. Anastasiou to utilize the talents of teachers who were temporarily unemployed.

A co-operative project between the schools of Vancouver and UBC's Faculty of Education, working in close association with the B.C. Teachers' Federation, VEEP is dedicated to the development of materials related to the Vancouver environment.

Most of the materials are designed to provide elementary school teachers and children with avenues of

exploration, on a continuing basis, in the environments that make up their real world, says Prof. Anastasiou.

In addition to hiring unemployed teachers, VEEP also gives regular classroom teachers the opportunity to come to UBC for a month to convert their ideas into guides for other teachers. In most cases a substitute teacher is paid for by VEEP.

VEEP prepares three different types of publications — philosophical and methodological statements such as a pamphlet on Primary Infant Schools; teachers' guides to the use of the outdoors as a classroom with the school as the base; and pupil booklets which assist them in recognizing and identifying aspects of the environment studied.

Vancouver Buses has attracted wide interest in educational circles because of its novel and simplified approach to a complex matter — familiarizing 6- to 10-year-old youngsters with the complicated Vancouver transit system.

"Surprising as it may seem, the vast majority of children are not oriented to the transit system in Vancouver," says Prof. Anastasiou. "In many areas of the city children depend on their parents' cars for transportation; some grow up never having used a bus."

Vancouver Buses is a board game which takes contestants on an imaginary trip from the Kootenay Loop, in Vancouver's East End, through downtown Vancouver and on to UBC, circling back along Southwest Marine Drive and following the city boundary back to the Kootenay Loop.

The route is divided into a series of colored squares keyed to a stack of 26 cards that come with the game. Students throw dice to progress along the route.

For veteran bus riders, the instructions on the cards mirror the real thing:

- The trolley poles have come off the wires, wait one turn.
- Road is being repaired, go back two squares.
- You have slept through your stop, go back two squares.

There are even transfer squares that whisk the players off on different routes which provide short-cuts back to "home."

There have been overtures from commercial interests who want to market the game through the stores, but the game has been copyrighted by VEEP and will be sold, at \$2.50 a game, as a teaching unit only.

The game was originally developed by two graduates of UBC's Faculty of Education, Hilary Strath and Wendy Stockstad, who this year have teaching positions at Prince George and Kelowna, respectively. Additions and suggestions were provided by Prof. Anastasiou and Cathy Henry, an Education student. B.C. Hydro also provided help with routes.

All of the other units produced to date by VEEP are in booklet form and, in some cases, have been so popular that two or three reprints have been necessary to meet the demand from Vancouver schools.

The "Stump Book" introduces children to what Prof. Anastasiou terms a "special part of the B.C. environment" — the giant stumps, some of them 100 years old, left by the pioneer loggers. The stumps provide a home for a wide range of organisms, from fungi to flowering plants.

A booklet on soils points out that B.C. coastal soil is more delicate than the soils of the Prairies and Eastern Canada and suggests forays into the forest with teaspoons, sieves and magnifying glasses to examine soil structure.

Vancouver's houses have distinctive architectural characteristics that enable a perceptive youngster to tell, among other things, the age of the house either by the style of the windows, the type of finish on the exterior walls or the location of the front porch. This is explained in a booklet entitled "Vancouver Houses."

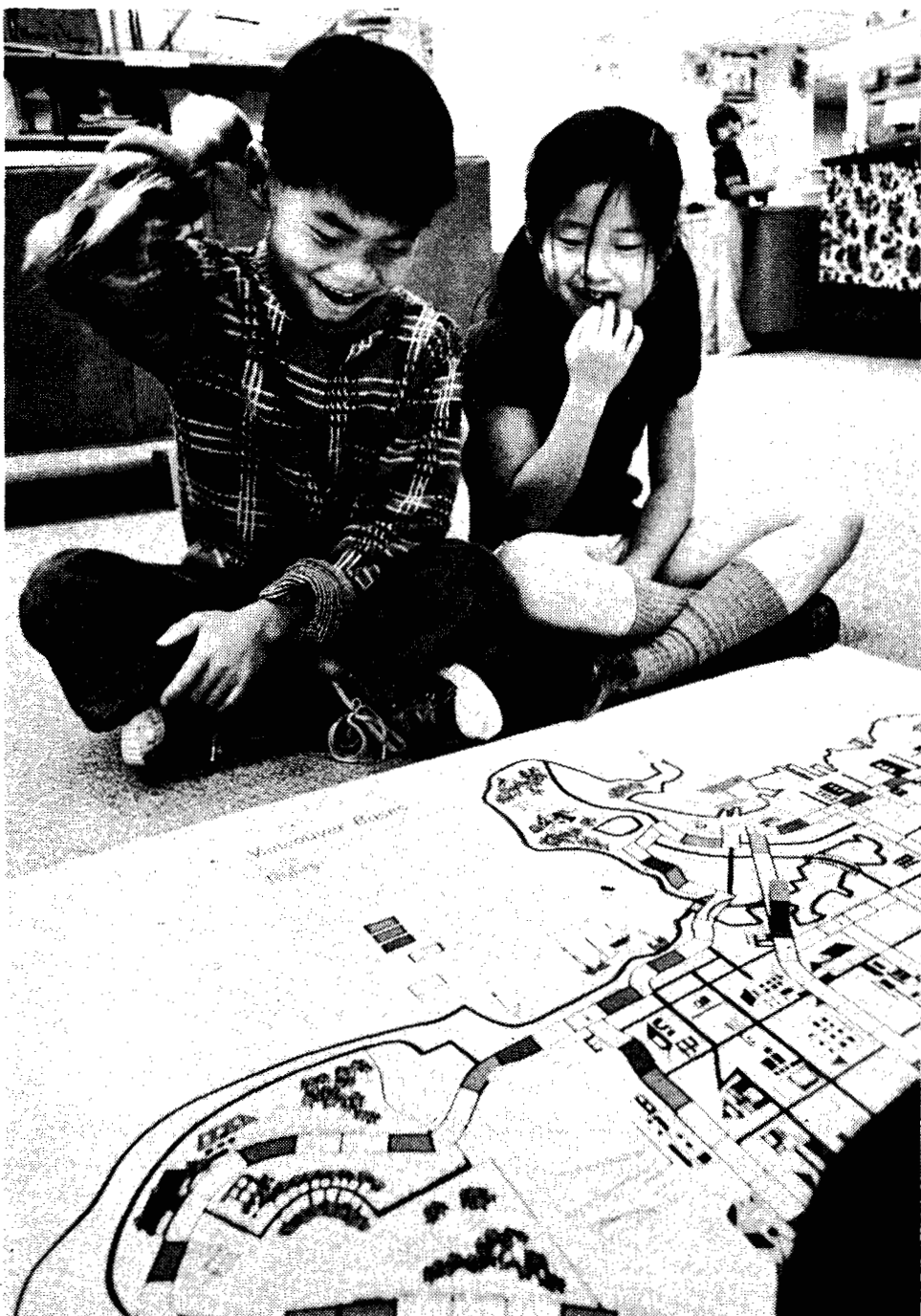
"Between Vancouver Tides" takes children to the intertidal zone and introduces them to barnacles, bullheads, seaweeds and sea snails.

## MANY SUBJECTS

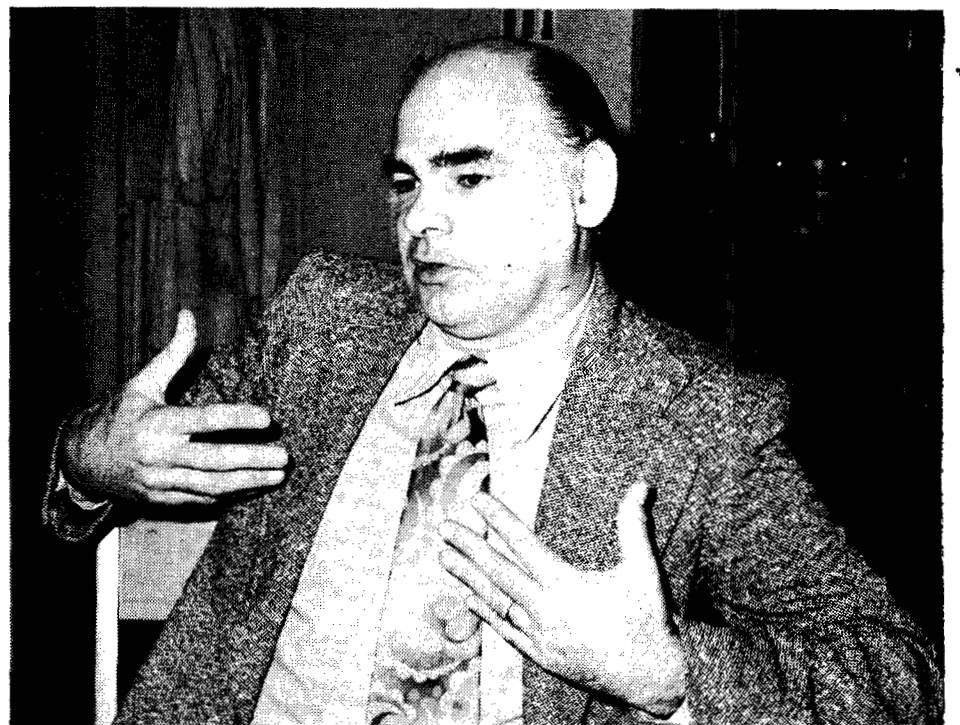
Other units have been produced on subjects ranging from creeks, through shopping centres, to field investigations of the mouse population.

The units are used by teachers in the classroom to develop their own curricula on the different subjects. They are designed to meet a tremendous shortage of lesson-aid material for elementary teachers in the fields of science and outdoor education, Prof. Anastasiou says.

It was a desire to meet this challenge that prompted Prof. Anastasiou to organize the Vancouver Environmental Education Project on the UBC campus 1½ years ago.



Picture by Dave Roels



Picture by Jim Banham

Two students at Mount Pleasant Elementary School in Vancouver are shown at left having the time of their lives playing Vancouver Buses, a board game devised by teachers working for the Vancouver Environmental Education Project, which is under the direction of Prof. Cliff Anastasiou, above, associate professor in UBC's Faculty of Education. Vancouver Buses is one of 23 teaching units related to the Vancouver environment produced by VEEP since it was initiated by Prof. Anastasiou 1½ years ago.



"There were quite a number of temporarily unemployed teachers at that time and I thought it would be a good idea if we could hire some of them either to work on lesson-aid materials or to substitute for classroom teachers who could be given time off to work on projects.

"We got a grant of \$20,000 which enabled us to hire eight people, some of whom wrote their own units while others replaced teachers in the classroom."

## HIGHLY QUALIFIED

Prof. Anastasiou emphasizes that the people he hired were highly qualified teachers. "Some of them had graduated from Simon Fraser University at Christmas and couldn't get jobs until the following September, others wanted to stay in the Lower Mainland until a job opening became available, and still others found our project an interesting challenge."

Prof. Anastasiou says VEEP owes a special vote of thanks to the B.C. Teachers' Federation's Lesson Aids Service, headed by Miss Shirley Cox, which distributes material to teachers. "Miss Cox has not only been very helpful in arranging our distribution, but has also assisted us with some difficult printing jobs," he said.

Last year VEEP not only got a \$20,000 LIP grant but also received money from the McLean and Leon and Thea Koerner Foundations to enable the hiring of 10 persons.

This year another application has gone forward for a LIP grant to cover the cost of the most ambitious project to date — development of a community curriculum for an entire school.

VEEP hopes to work with the teaching staff of one elementary school, and interested parents, to develop teaching aids designed to enhance the children's appreciation of the community in which they live.

VEEP is currently in the midst of preparation of a series of 14 booklets on outdoor studies which can be integrated into different study areas, such as social studies and language arts. Prof. Anastasiou hopes to bring more teachers to the University from different parts of the province to work in their fields of interest.

He is also getting more of his students involved with VEEP. "Cathy Henry, who worked on the Vancouver Buses project, has produced a unit on outdoor weaving and another fourth-year Education student, Pat Woolsey, has done one on bread-making called 'Loafing Around with Bread'."

The Courtenay School Board has been so impressed with the work produced to date that it is giving a teacher a month off, and paying all of his expenses, to come to UBC to produce a unit on environmental science for Grade XI students.

While acting as project director for VEEP — "I'm the guy who has to make sure that the money comes in" — would be a full-time job for most people, it's only part of the load that Prof. Anastasiou carries in the Faculty of Education.

He also teaches science methods and biology to undergraduate students and runs a course in curriculum development for graduate students.

His real field of research is mycology — the study of fungi. "I hate to admit it, but I am finding that children are more interesting than fungi, though some day I might get back to growing the odd mushroom," he laughs.

## INVOLVE STUDENTS

Actually, VEEP's headquarters, in an old army hut behind UBC's education building, was previously used by Prof. Anastasiou for his mycological research.

"I guess you could say that administering the Vancouver Environmental Education Project is my area of research, though keeping books and hassling people for money doesn't sound too much like research," he says. However, he has found that preparing teaching aids is such an effective device for the professional development of teachers that he is getting more and more of his own students involved.

"For too long, we have had a textbook-oriented education system," he says. "Unless it was a fancy publishing job, produced on glossy paper by somebody with a big name, it wasn't considered worthwhile."

"I think that VEEP is proving, once and for all, that locally-oriented teaching materials produced by imaginative and creative people can do a most effective job in the education of our children."

# Noted Psychologist To Lecture at UBC

Prof. B.F. Skinner, the most influential of living American psychologists and the most controversial contemporary figure in the science of human behavior, will visit the UBC campus on Nov. 15 to lecture as a Cecil H. and Ida Green Visiting Professor.

Prof. Skinner, who is Edgar Pierce Professor of Psychology at Harvard University, will speak on the topic "Obstacles to a Science of Behavior" in Lecture Hall 2 in the Instructional Resources Centre on the campus.

He is perhaps best known for his book, *Beyond Freedom and Dignity*, which expounds the thesis that we cannot afford freedom and that it must be replaced by control over man, his conduct and his culture.

Prof. Skinner is also the inventor of the teaching machine, an outgrowth of many years of research into "reinforced" or rewarded learning. Some observers credit him with starting a revolution in the technology of education.

☆ ☆ ☆



MRS. A. ISOBEL MacLEOD

## Woodward Lecture Set for Nov. 16

Mrs. A. Isobel MacLeod, director of nursing at the Montreal General Hospital, will give this year's Marion Woodward Lecture in Lecture Hall 2 in the P.A. Woodward Instructional Resources Centre on Friday, Nov. 16, at 8 p.m.

Mrs. MacLeod is past president of the Canadian Nurses' Association and has extensive experience in the administration of nursing services in community and hospital settings.

The lecture is made possible through the support of the Mr. and Mrs. P.A. Woodward's Foundation.

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## Woman President To Give Two Talks

Canada's only woman university president will speak twice at UBC in November.

Sister Catherine Wallace, president of Mount Saint Vincent University in Halifax, Nova Scotia, and a strong advocate of women's rights, will visit UBC as a Dal Grauer Lecturer.

On Tuesday, Nov. 20, she will speak in UBC's Old Auditorium at 12:30 p.m. on the topic "Women and the Numbers Game."

The following evening (Wednesday, Nov. 21) she will speak in the Common Block of the Totem Park

Residence at 8:15 p.m. on "Women and the Just Society."

The Dal Grauer Memorial Lectures were established as a memorial to the late Dr. Grauer, who was Chancellor of UBC from 1957 to 1961.

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## Campus Visitor Plans Addresses

A Cecil H. and Ida Green Visiting Professor at UBC will give a number of public lectures during November.

Prof. Frederick Combella, who is attached to the UBC Classics Department for the first term of the current Winter Session, will address the Vancouver branch of the Humanities Association in the UBC Faculty Club on Wednesday, Nov. 7, on the topic "Men and Women in Homer's *Odyssey*." His talk begins at 8 p.m.

On Wednesday, Nov. 14, Prof. Combella will give a 12:30 p.m. talk in Room 100 of the Buchanan Building on the topic "A.E. Housman: The Lord High Executioner."

The following evening (Thursday, Nov. 15), Prof. Combella will appear on the UBC television series, "Beyond the Memory of Man," on Channel 10 (Vancouver Cablevision) at 9:30 p.m. He will discuss the poet Homer.

## Suggestions Sought by Committee

Do you have anyone in mind to succeed Dr. Walter H. Gage as President of the University?

Perhaps you have "opinions as to appropriate attributes of any candidate."

If you do, the 24-member Advisory Committee for the Recommendation of Presidential Candidates to the Board of Governors is eager to hear from you.

The committee, chaired by Mrs. Beverley K. Lecky, a member of the Board, has also asked for "expressions of opinion concerning the crucial issues likely to affect the scope and nature of the office of President in the years ahead."

The committee was formed during the summer after President Gage signified his intention to retire as President on June 30, 1975.

In a letter addressed to the University community, Mrs. Lecky said:

"All members of the University Community — faculty, students, staff and alumni — are being asked to assist the Committee by providing names of prospective candidates and by submitting opinions as to appropriate attributes of any candidate. In addition, the Committee has advertised widely in appropriate publications, both in this country and abroad, the fact that candidates are to be considered for the office of President.

"In submitting names of persons whom you consider to be suitable candidates for the position of President of UBC, it is important that you provide the Committee with as much personal and academic biographical information as possible, and with your reasons for proposing each name. It will assist the Committee if you can give an indication that someone you name is available for consideration as a potential candidate.

"Whether or not you propose candidates, the Committee would like your views on the attributes you would consider it desirable for the next President of this University to possess. In addition, the Committee would welcome expressions of opinions concerning the crucial issues likely to affect the scope and nature of the office of President in the years ahead.

"Your reply will be treated in absolute confidence by the Committee.

"Address: Mrs. Beverley K. Lecky, Room 107, Main Mall North Administration Building, University of British Columbia, Vancouver 8, B.C."

# Resident Head Named

Dr. John R. Wood, of UBC's Department of Political Science, has been named resident director of the Shastri Indo-Canadian Institute in New Delhi, India.

Dr. Wood, who is on leave of absence during the 1973-74 academic year, has also been awarded



DR. JOHN R. WOOD

a Shastri Senior Fellowship for research into changing patterns of legislative behavior in the Indian Parliament.

UBC is a member of the Institute, which provides research fellowships for Canadian scholars in India and acquires Indian publications for the libraries of Canadian universities.

Since the Institute came into existence in 1968, 12 UBC professors and graduate students have won Shastri research fellowships and some 20,000 volumes of Indian books and documents have been acquired by the UBC library.

Accompanying Dr. Wood to India is his wife, Merry, a research associate in the UBC Institute of Asian and Slavonic Research.

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Dean Michael Shaw, head of UBC's Faculty of Agricultural Sciences, has been inducted as a fellow of the American Phytopathological Society.

It is believed that Dean Shaw is only the third Canadian to be named a fellow of the Society, a 2,600-member professional organization made up of scientists who study plant diseases.

Dean Shaw, who was awarded the gold medal of the Canadian Society of Plant Physiologists in 1971, has made major contributions to plant pathology in research, teaching, editing and administration.

He has been editor of the *Canadian Journal of Botany* since 1964 and is a member of the editorial boards of *Physiological Plant Pathology* and *Science Forum*.

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Four UBC professors were recently inducted as fellows of the Royal Society of Canada, this country's most prestigious academic organization.

The new fellows are: Prof. William Robbins, of the English Department; Prof. Gerard Tougas, of the French Department; Prof. Gideon Rosenbluth, of the Department of Economics; and Prof. Donald Bures, who was recently named head of the Department of Mathematics.

A professor in UBC's Faculty of Commerce and Business Administration has been awarded the American Institute of Public Accountants' top literature award.

Prof. Richard V. Mattessich was awarded the Accounting Literature Prize, 1972, for his article "Methodological Preconditions and Problems of a General Theory of Accounting."

The award is given for the most notable contribution to accounting literature published in the English language each year.

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Prof. Zbigniew Folejewski, of UBC's Department of Slavonic Studies, received an honorary degree (Doctor Honoris Causa) from the University of Warsaw during the Seventh International Congress of Slavists earlier this year. The award was given for his outstanding contributions to Slavonic studies, particularly in the area of comparative literature.

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Prof. William Nicholls, head of the Department of Religious Studies, and Dr. Ian Kent, a psychiatrist and honorary research associate in the same department, were awarded Canada Council travel grants to read joint papers at the 25th Anniversary World Mental Health Congress and the International Psychiatric Conference of the World Psychiatric Association, held in Sydney, Australia, earlier this month.

The papers, on "Colliding Religions and the Quest for Personal Integration," and "Identity Therapy in the Treatment of Adolescents," are the outcome of interdisciplinary research carried on by the authors in the Department of Religious Studies since 1969.

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Prof. Donald McCorkle, head of UBC's Department of Music, has been named chairman of the committee for Graduate Record Examinations in music. Administered by the Princeton-based Educational Testing Service, Graduate Record Examinations are required for admission to many graduate and professional schools and fellowship competitions in the U.S. and Canada.

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Prof. Margaret E. Prang, of UBC's History Department, has been named to the 14-member Historic Sites and Monuments Board of Canada, which advises the federal Minister of Indian Affairs on the commemoration of persons, places and events of national historic significance.

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Dr. Robert L. Noble, director of UBC's Cancer Research Centre and professor of physiology, received the honorary degree of Doctor of Science Oct. 26 at the University of Western Ontario.

Dr. Noble, a UBC faculty member since 1960, was formerly professor of medicine and associate director of the Collip Medical Research Laboratory at Western Ontario. One of his major contributions to cancer research was his leadership of the team which isolated a compound known as VLB, which is used in the treatment of various types of cancer.

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Prof. Jean Laponce, of UBC's Department of Political Science, has been elected president of the International Political Science Association, a federation of national associations representing 33 countries. The election took place at the triennial Congress of the Association in Montreal. Prof. Laponce is the first Canadian to be elected to this position and will serve for a three-year term.



Picture by IMC Photo Department

MISS BARBARA J. LARKIN

## Councillor Wins Lett Award

Miss Barbara J. Larkin, representative of the School of Rehabilitation Medicine on Students' Council at the University of B.C., has been named the 1973-74 winner of the Sherwood Lett Memorial Scholarship.

The \$1,500 scholarship is awarded annually to a student who reflects the high standards of scholastic achievement, sportsmanship and ability to serve and lead others which characterized the late Chief Justice Sherwood Lett, who was Chancellor of UBC from 1951 to 1957.

Miss Larkin, the daughter of Mr. and Mrs. Peter Larkin, of 25 Courtney Crescent, New Westminster, is president of the Rehabilitation Medicine Undergraduate Society and in this capacity sits on Students' Council as a representative of the School. (She is not related to Prof. Peter Larkin, head of UBC's Zoology Department.)

A graduate of New Westminster Senior Secondary School, Miss Larkin entered UBC in 1970. In high school she was Grade IX and XII representative on students' council and took an active interest in sports as a member of the volleyball, softball, basketball and tennis teams.

In high school she won two Big Blocks for outstanding athletic achievement as a member of women's basketball and tennis teams. She is also an active member of the New Westminster Tennis Club.

Miss Larkin is also active in the annual Wheelathon sponsored by the UBC School of Rehabilitation Medicine. The event is modelled on the Miles for Millions walk and involves a wheelchair tour around the perimeter of Stanley Park. Miss Larkin was treasurer for the 1973 event, which raised more than \$13,000 for organizations providing services for paraplegics.

Miss Larkin has maintained first-class standing in her studies in Rehabilitation Medicine and will receive the degree of Bachelor of Science in Rehabilitation in 1974.

The Lett Scholarship is awarded by a committee made up of representatives of the UBC Alumni Association, the Alma Mater Society and the Graduate Students' Association.

Sherwood Lett, for whom the scholarship is named, was the first president of UBC's Alma Mater Society in 1915 and Rhodes Scholar in 1919.

He was named chief justice of the Supreme Court of B.C. in 1955, and in 1963, a year before his death, became Chief Justice of the Court of Appeal, with the title of Chief Justice of B.C.

## UBC Television Series Seen on North Shore

A television series entitled "Beyond the Memory of Man," featuring lecturers from UBC's Faculty of Arts and dealing with aspects of classical and medieval art, architecture and archeology, can now be seen by all cable-television subscribers in the Lower Mainland.

Beginning Oct. 29, the program is being

distributed by North West Community Video Ltd. on Channel 10 to its subscribers in North and West Vancouver, who will see it at 7:30 p.m. Mondays.

For other viewers on the North Shore and throughout the rest of the Lower Mainland, the series is available on Channel 10 of Vancouver Cablevision and its affiliated systems at 9:30 p.m. Thursdays.

# Bookstore Sets Dates

Some 250,000 books representing 80,000 different titles will go on sale in UBC's Brock Hall beginning Nov. 14.

UBC Bookstore manager Bob Smith claims that his annual sale is the biggest in Canada and provides benefits for book-lovers in all parts of the province.

"In addition to providing books for the University community and the general public, the sale attracts many school and public librarians from all parts of the province," he said.

Librarians from as far away as Dawson Creek in northern B.C. came to last year's sale and other librarians made several trips to the campus to pick up bargains for school and public libraries.

The first four days of the sale, Nov. 14 to 17, will be for members of the University community only — students, faculty, alumni and staff. Sale hours during this four-day period will be 9 a.m. to 5 p.m.

The event will be open to the public from Nov. 19 to Dec. 1. Sale hours will be 9 a.m. to 9 p.m. Monday through Friday and 9 a.m. to 5 p.m. on Saturdays.

Some two-thirds of the sale books will be academic reference material covering a wide range of fields from history to accounting.

The balance of the sale books ("The real bargain material," according to Mr. Smith) include best-selling novels, art books, children's books and volumes on handicrafts, gardening and cooking.

About one-third of the sale material has been imported and the balance is from the Bookstore's own inventory of books.

# Award for Hormone Research

Two hormones which could be used in the diagnosis and treatment of some gastrointestinal ailments have been discovered and isolated by a University of B.C. medical researcher.

Dr. John Brown, professor in UBC's Department of Physiology, says that both the polypeptide hormones are located in the duodenum, the short section of small intestine attached to the stomach.

He was awarded the 1973 \$1,000 Jacob Biely Faculty Research Prize, given to a UBC faculty member for distinguished research carried out and published over the last five years.

The prize was established by Mr. and Mrs. George Biely in 1969 to honor Prof. Biely, former head of UBC's Department of Poultry Science and one of Canada's leading agriculturalists.

Dr. Brown has christened one hormone motilin. The second, so far without a name, is simply referred to by Dr. Brown as gastric inhibitory polypeptide or GIP.

"GIP inhibits the secretion of hydrochloric acid in the stomach," Dr. Brown said. "It could be used in controlling abnormally large secretions of hydrochloric acid over short periods of time. This would be especially beneficial to people suffering from duodenal ulcers.

"We've also discovered that GIP is the most potent releaser of insulin from the pancreas known to medicine. Insulin is needed for the utilization of food carbohydrates by the body. We've shown in man that following eating carbohydrates, high levels of GIP appear in the blood stream about 45 minutes before the peak level of insulin appears in the blood stream from the pancreas."

Dr. Brown said he would like to see if injections of GIP can help patients who develop diabetes or insulin deficiency late in life. He would be more interested in testing the effectiveness of the hormone on diabetics who also have duodenal ulcers, he said.

Motilin, the other hormone, causes the stomach to contract and empty.

"Motilin could be given to patients to help in the x-ray testing of their stomach and duodenum," Dr. Brown said, "or given to patients following gastric surgery for duodenal ulcers. Often following this type of surgery the stomach won't empty. An injection of motilin might overcome this."



IMPASSIVE referee watches as enthusiastic forwards of UBC English rugby team prepare to lock horns with opposition during September tour of Wales and England.

All-out play of the UBC team brought a smile of satisfaction to the face of Coach Donn Spence. Picture courtesy Western Mail and Echo, Cardiff.

# 'Birds Win Four on Overseas Rugby Tour

Donn Spence, coach of the UBC Thunderbird English rugby team, was quite frankly apprehensive this past summer as he prepared for a seven-game tour of Wales and England in September with his 23-man squad.

The local pundits weren't very much help to coach Spence. "Most people said we'd bitten off more than we could chew, that we wouldn't win a single game and that we'd be mangled in the scrimmages," he said recently.

So Coach Spence's apprehensiveness was justified. He was, after all, taking his team to the place where the game was invented and where it is still played with an almost religious fervor.

## COACH SMILES

Well, by the time the tour was over in late September, that look of apprehension on Donn Spence's face had changed to a wide smile of satisfaction.

The 'Birds outdid themselves on the tour, winning four, tying one and losing two against teams that are rated among the best in the British Isles.

Coach Spence is reluctant to single out any particular player or players for praise but when pressed he will describe the play of his three front-row men — Chris Hinkson, Warwick Harivel and Steve Owen — as outstanding.

"Front-row play in Wales and England is tougher and more brutal than in North America," says Coach Spence, "but our three front-row men stood up very well despite the fact that they were outweighed by each team we played."

If Coach Spence is chary with his praise of the UBC players, Welsh rugby writers were not. One writer recorded that Preston Wiley, the 'Birds' scrum half, played "heroically" and the speed of Will Mackenzie on the right wing "had the crowd gasping" and the defence "floundering," in a game against the Bridgend club, Welsh rugby league champions on several occasions.

The UBC team opened its tour in Wales with a 6-6 tie against Tredgar, which managed only penalty goals against the visitors. The UBC side battled opening-night nerves, a steady downpour of rain and a field with ankle-deep grass to gain their tie.

Tougher competition followed at Neath, where the Thunderbirds went down by a score of 16-0 but gained high praise from J.B.G. Thomas, the doyen of Welsh rugby writers.

He wrote: "The University of British Columbia is one of the best, if not the best, drilled and coached side in Canada. The players on view knew what to do and did it well, while their courage and speed about the field in defence was as good as that of the best British clubs."

The Thunderbirds managed their first win against the former league champion Bridgend club by a single point, 12-11. The margin was a penalty goal, kicked two minutes from the end by acting captain Ray Banks, and capped what reporter John Billot described as a "thrilling contest."

In their fourth and final contest in Wales the UBC team routed Tenby 29-6. The 'Birds led only 7-3 at half time but in the second half, led by winger Spence McTavish, last year's winner of the Bobby Gaul Trophy as UBC's outstanding athlete, who scored two tries, the visitors rolled over their opponents.

The first of UBC's three matches in England, against Rossland Park, was lost by a single point, 12-11. The game was marred by poor refereeing, something which even the home team admitted after the contest.

Game six, against the Old Whitgiftians, found the 'Birds losing 19-9 late in the game. The visitors mounted a devastating attack in the last seven minutes, however, to score five tries and win 35-19.

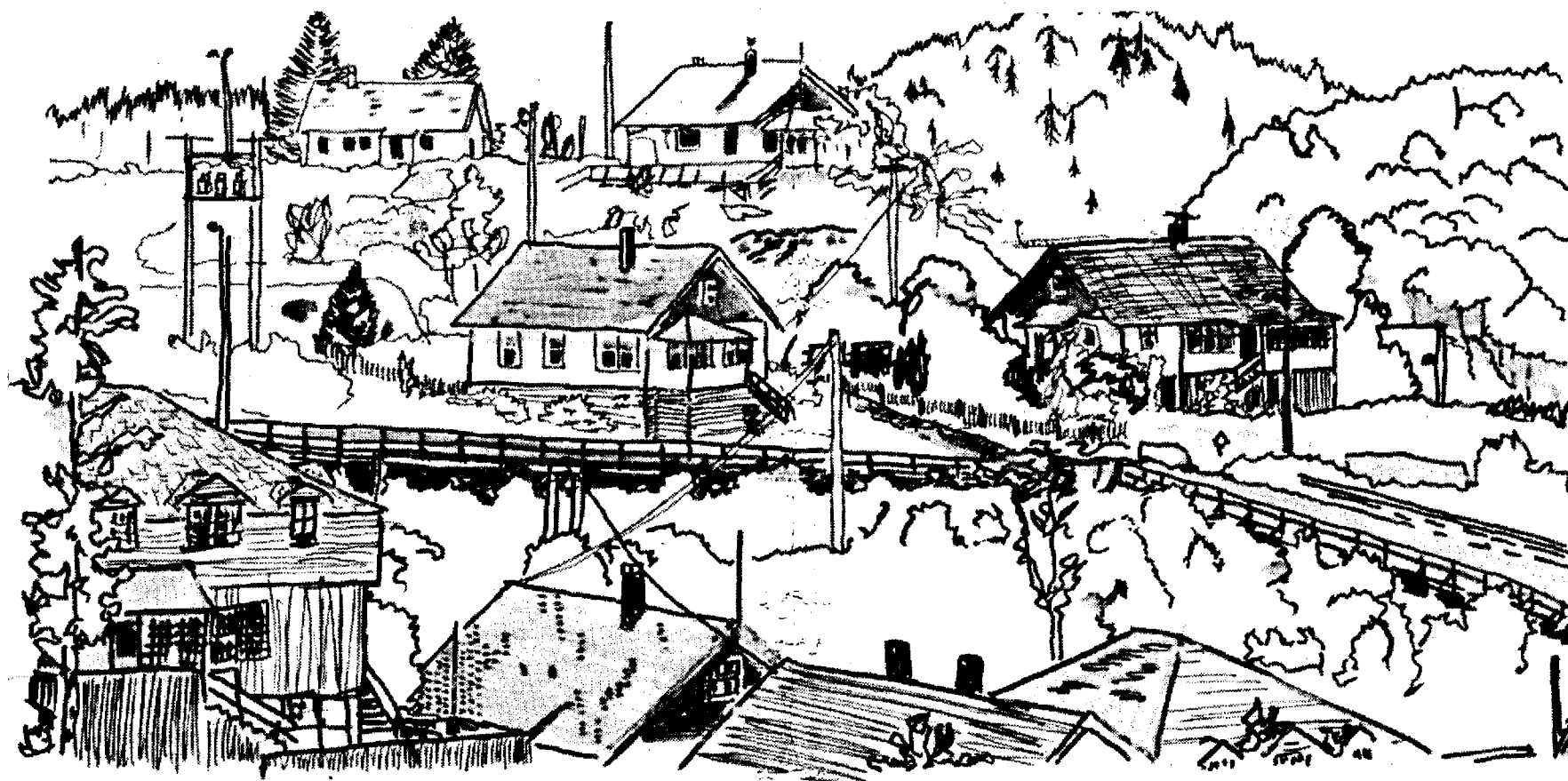
## HIT OFF FIELD

The tour was capped with a 22-19 victory over a top London club, Blackheath, under adverse conditions.

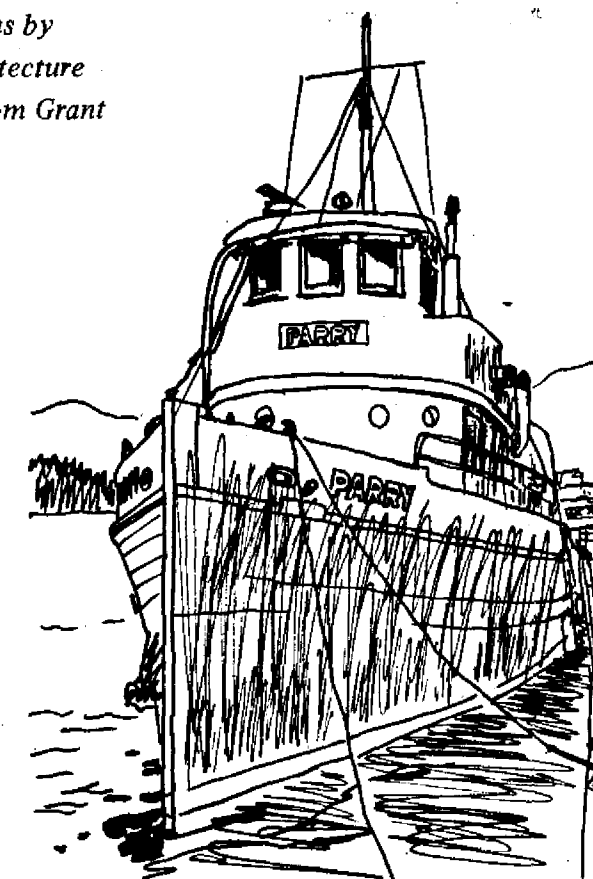
The touring UBC team proved to be almost as much of a hit off the field as on. An official of the National Sports Centre of Wales, where the 'Birds were quartered during their visit, was impressed with the "extremely friendly and courteous" manner of the visitors off the field.

Little wonder that Donn Spence came home smiling.





Illustrations by  
UBC Architecture  
Student Tom Grant



## UBC School of Architecture Students Do Their Thing in Ocean Falls

BY JOHN ARNETT  
UBC Reports Staff Writer

Officially, the UBC School of Architecture's annual orientation program for first-year students is billed as an "encounter with the environment" and is designed to challenge the creative ability of young people who will some day design the buildings in which we live, work and play.

Unofficially, it is a group of strangers from a variety of academic backgrounds getting to know one another and their faculty members very well during two weeks of close contact. By the time they return to the campus they will have had a series of common experiences which will serve as a basis for sharing and illustrating ideas throughout their years of architectural studies at UBC.

In years gone by, students have shared experiences ranging from living under primitive conditions on an island in the Gulf of Georgia to doing special surveys in Vancouver's crowded West End.

This year's students sampled an environment that was once common in British Columbia, but which has now all but disappeared — the isolated coastal company town, in this case Ocean Falls, 230 sea miles north of Vancouver.

Earlier this year, the B.C. government purchased the

money-losing pulp mill at Ocean Falls from Crown Zellerbach Ltd. on the eve of the closure of the mill and the inevitable death of the town.

The UBC contingent, made up of more than 70 students and faculty members, travelled to Ocean Falls aboard a slow boat, learning not only to get along with one another during the three-day trip, but also seeing something of the rugged coastline and the towns of Campbell River and Alert Bay en route.

At Ocean Falls they were put up in the only hotel in town and were left to find out for themselves what makes a company town tick and to try to develop some ideas of their own as to how the quality of life could be improved in a one-industry town, which clings to the side of a mountain and is drenched by 200 inches of rain a year.

The students learned their first two lessons about company-town life early when their boat, the 80-foot former hydrographic vessel Parry, lived up to its reputation and arrived hours behind schedule.

Seventy-two ravenous UBC students and teachers stormed the cafeteria, only to find that the company-owned eating establishment, located in the company-owned hotel, was closed for the night and that it was the only eating place in town.

Lesson No. 1 — In a company town, you even eat out on company time.

Fortunately, the Parry's arrival had been duly noted by the harbormaster, Mr. Ron Acheson, who prevailed on the hotel manager, Mr. Ron Acheson, to reopen the cafeteria and cook up some hamburgers and coffee. The group was then welcomed by the townsite manager, Mr. Ron Acheson, who introduced the school board secretary, Mr. Ron Acheson, and the customs officer, Mr. Ron Acheson.

Lesson No. 2 — One administrative official is likely to wear many hats in a company town.

The next day the students quickly reconnoitred the social centres of the community — Branch 144 of the Canadian Legion and the Martin Inn beer parlor — and then set out to see for themselves a town which had had a sudden reprieve from death.

Student Lewis Huey spent most of his time walking around talking with people and "getting impressions." He said the town may continue to cling to life through the operation of the mill but it's his belief that it needs a healthy transfusion of new industry, perhaps repair facilities to serve the fishing fleets that bob in the salmon-filled waters of Dean Channel.

Ann Marie Strapp, a graduate of McGill University, who was seeing the B.C. coast for the first time, interviewed different people in town to get their

reactions to their environment.

"I talked with a priest, a member of the RCMP and many of the workers in the mill," she said. "The main impression that I got was a sense of real commitment to the town. The people love the town and want to see it survive. I wouldn't mind living there myself if I had a cheap means of getting out now and then.

"However, I think that there should be more decision-making in the hands of the people instead of having the town run completely by the company. I hope that now that the government owns the mill it will be willing to turn the town over to the people."

Victor Nahmias, who came to UBC from the University of Pennsylvania, said he spent most of his time in and around the mill. "I guess I got to know half of the people in the mill after a few days."

He said he thought the people had become very complacent with their situation. "It was sort of 'Big Brother will look after everything.' Rents are low and if something needs repairing in the house the company will look after it. The corporate fathers, in the form of the company officials, look after you. People I talked with not only had very few of the responsibilities of people who live in non-company towns, but they didn't seem to want them."

He said he was impressed, however, with the devotion that residents have to the town. "One man told me that

this was his mill and his town, and he was going to do his damndest to make sure that both were successful. He had come to Ocean Falls only a few months earlier from New Brunswick."

Allan Collier "fell in love" with the place to such an extent that he stayed on for five days after all the other students had left.

The mill's junk yard, of all places, moved him to a form of unusual artistic expression — the creation of a "junk house" made of discarded household objects, such as an old refrigerator, a cracked toilet, a partially-smashed television set and other items which, when assembled in locations that they would normally occupy in a house, resembled a grotesque set for some sort of futuristic play dealing with the relics of an ancient society.

Dr. Richard Seaton, an associate professor in the School of Architecture and also an environmental psychologist in UBC's Office of Academic Planning, was one of the faculty members on the trip.

"Doing your own thing is central to the philosophy of the School of Architecture and the students on this trip were certainly permitted to do their own thing," he said.

Large sheets of newsprint were pinned to the walls of a conference room in the hotel headquarters of the

project and students were encouraged to draw pictures, write poems and comments and otherwise display visually their impressions of the town.

Even the children of the town got a bang out of the visit. On the final day of their stay in town, the students staged a paper parade, dressing up in paper costumes representing everything from policemen to bishops.

The good ship Parry's homeward journey was uneventful, except for an incident early in the trip when a RCMP patrol boat churned up to unload a student who had been left behind.

Townsit manager Acheson had the final say on the trip in a telephone interview with UBC Reports:

"The whole town enjoyed their visit very much and the students were interested in what they saw. I stood up, on one occasion, to give a five-minute talk and they kept me on my feet for more than an hour with questions.

"They certainly popped up all over the place, asking the most ingenious questions. I think that they gave the town's residents a bit of a boost at a time when they needed it most.

"You hear so many things about how groups of university students behave that you don't really know what to expect. We found them to be friendly, courteous and great company. We all hope that they come again."



Picture by Dave Roels

## Ocean Falls 'Lives'

Ocean Falls "lives" in Vancouver.

The involvement of UBC School of Architecture students with Ocean Falls didn't end when they returned to the campus. Fourteen students formed a tutorial group to study social, political, economic and architectural aspects of the community and to develop an environmental design proposal, including plans for residential development and a ferry service from Vancouver Island.

The "Ocean Falls Room," pictured at left, on the third floor of the Frederic Lasserre Building at UBC, is an attempt to recreate the Ocean Falls environment, utilizing such things as a leaf-covered floor, a plastic-shrouded ceiling to simulate rain clouds, and a case of empty beer bottles to symbolize one of the most popular leisure-time activities in the isolated northern community.

Shown enjoying the environment are, left to right, Lorne Prokopy, Wendy Pullan and Victor Nahmia.

The walls of the room are lined with photographs, plans, drawings and maps of the community. Interested visitors can also view a slide presentation, a movie or a videotape made by the students during their visit to the town.

Even the youngsters of Ocean Falls got involved when students and faculty members from UBC's School of Architecture visited the northern coastal community in September. On the last day of their visit, students organized a paper parade, pictured at right, with participants dressing up in paper costumes representing everything from policemen to bishops.



Picture by Doug Oliver

**T**HINK back a few years to those carefree elementary school days.

Your teachers no doubt reflected your own background.

You learned to read with Dick and Jane and Spot — textbook characters as familiar to you as any youngster on your street.

Fitting into your classroom surroundings presented little problem because what went on inside the school was merely an extension of what happened at home and at play.

But things *could* have been different.

Same classroom, same kids, but a teacher with a different colored skin, from a race with which you had very little contact and every reason to distrust because of its treatment of your people.

A teacher who made you feel totally inadequate, and possibly quite stupid, because of your inability to respond, no matter how hard you tried, to questions that had little meaning to you and even less relevance to your life.

A horrible thought?

Indian kids have this experience every day.

Jean Misyok, a Grade X student from Aiyansh, in the Nass Valley in northern B.C., wrote about it in a recent issue of a newsletter issued by UBC's Indian Education Resources Centre.

"It isn't easy for the white teacher and the Indian children to understand one another because the white man's culture is altogether different from that of the Indian's culture. . . .

"They don't even know where the white teacher is from and they know absolutely nothing about the teacher. The same goes for the white teacher, who knows absolutely nothing about the Indian children. . . .

"I think that if I were to go onto a reserve that I had lived on for 13 years I would certainly accomplish a lot more in teaching the Indian children because I had grown up the same way that they are growing up. So I feel that I can help and understand them more than a white teacher can. . . ."

Fortunately for the Jean Misyoks and the hundreds of other young Indian children in British Columbia who face failure and frustration in the classroom, an attempt is now being made at the University of B.C. to prepare teachers more adequately to teach in schools with large Indian populations.

A course has been designed especially for students who want to teach in Indian schools. Students — mostly white — taking the course not only have an opportunity to meet in seminars and discussion groups with representatives of the Indian community but they gain valuable practice teaching experience in schools with large numbers of Indian students.

"The result," says Dr. Art More, an assistant professor in UBC's Faculty of Education and the man who has largely been responsible for the development of the course, "is a group of young teachers who will have a knowledge of the Indian culture and a much better understanding of the Indian people when they begin their teaching careers."

More than 300 teachers have successfully completed the course since it was first offered in 1970. In addition to the regular course during the University's academic year, courses are offered at Summer Session for teachers who are already in the schools, and in-service courses are given in areas of the province with large Indian populations. The first in-service course was given in Williams Lake in 1971-72, followed by Chilliwack last year and Kitimat-Terrace this year.

**I**NTEREST in UBC's Indian Education course, as it is known, has exceeded all expectations, says Dr. More. "Not only is there the interest on the part of students at the University, but an increasing number of teachers in the schools are taking the course at Summer Session."

Dr. More attributes the increased interest in teaching Indian children to a growing social consciousness among student teachers. "This social consciousness certainly wasn't there in my day as a student and perhaps that is one of the reasons why Indian children have been short-changed by the education system over the years,"

says Dr. More, who was born on the Kispiox reserve, the son of a United Church clergyman.

He says there is also increasing pressure from parents in Indian communities for teachers with some experience in working with Indian youngsters. "Indian parents are fed up with having to put up with teachers who have had absolutely no experience in working with Indian children. They are becoming aware of the fact that we are offering a course at UBC and are seeking out teachers who have taken it."

Dr. More says some young teachers are finding that working with Indian children is offering them far greater opportunities for accomplishment than working in a normal all-white classroom situation.

"For a start, it opens a teacher's eyes to a way of life and a people whom he or she barely knows, even though

## getting to know them...

BY JOHN ARNETT  
UBC Reports  
Staff Writer

they are teaching fellow Canadians. Usually their contacts with Indians have been restricted to seeing them in the seamier parts of town or driving past reserves.

"But they soon realize that Indian children and their parents are human beings with the same strengths and weaknesses, the same likes and dislikes as anybody else. But because of the great cultural differences they have to give much more of themselves as teachers if they are to see any return for their efforts.

"Many students have come back to tell me, after a year of teaching Indian children, that they have learned more about themselves as individuals in that one year than in four years at University, simply because they had to reassess their own sense of values in order to communicate with Indian youngsters."

Dr. More says that the first thing he tries to instill into the students taking his course at UBC is an understanding of the cultural heritage of the Indian people. "But that is only a starting point. The really important thing is attitude — trying to prepare students to have a positive attitude toward their students, to see the good things as well as the bad things, to understand that there are no genetic differences in the ability of Indian children to learn compared with white children, only differences based on home life and environment and parental attitudes."

An understanding, too, of why Indian children have difficulties in the classroom is essential in shaping the attitudes of teachers, adds Dr. More. "They must understand, for example, that many of the parents of today's Indian students were taught, quite literally, by some of the dregs of the teaching profession, who strapped Indian children because they spoke their native tongue at school, who ridiculed and degraded them because of their apparent inability to learn. These negative and hostile feelings have remained with the parents and are transferred to their children."

Dr. More believes that perhaps the real secret of success of the course is that it has been developed in close consultation with representatives of the Indian community and the Indian Education Resources Centre on the campus.

"We are particularly fortunate in the calibre of the resources people who are willing to stand up and give some pretty frank assessments of the problems in Indian education and offer some solutions of their own," adds Dr. More.

For example, the resource people at the 1973 Summer Session course included Mr. Bill Mussell, then director of the Union of B.C. Indian Chiefs; Mr. Lonnie Hindle, secretary-treasurer of the B.C. Association for Non-Status Indians; Mr. George Wilson, director of Indian Education for the Province of B.C.; Mr. Kent Gooderham, acting director of Indian Education for the Department of Indian Affairs, Ottawa; and Mr. Alvin

McKay, then director of the Indian Education Resources Centre on the campus.

But perhaps the most valuable experience of all for the young teachers-to-be is the practical experience in the schools. This spring, 32 of the students who took the Faculty of Education course during the 1972-73 academic year spent six weeks in schools in the Queen Charlotte Islands, Terrace and Prince Rupert.

Assigned to different schools in the area, they worked with the teachers in the classroom and were given the opportunity to teach classes themselves.

The experience was an eye-opener for some.

Linda Poole, of Vancouver, was assigned to a Grade VIII class in George M. Dawson Secondary School in Massett, a fully integrated Indian-white school in the Queen Charlottes. "The first time that I was in the classroom alone they did everything they could to get a rise out of me, by not paying attention, laughing at jokes I didn't make and generally acting up. It was terribly frustrating and I was almost reduced to tears, but when it was all over I recalled that I used to do the same thing myself when a student teacher came to class."

Mike Nahachuski, of Surrey, who was assigned to the school at Queen Charlotte City, very soon got to know the feeling of a stranger in a strange town "where everybody knows everybody else."

"Sure I found some of the kids tough to handle, mainly because they were seeing me for the first time, but I kept thinking about the things that we had talked about in class back at UBC and this helped me a lot."

Kathy Hyde, a teacher at Dawson Secondary in Massett, is a shining example of what the UBC program is trying to achieve. A 1972 graduate of the course, she has been instrumental in the establishment of an Indian studies course at the school — the first such course in the Islands and one of the few of its kind in the province.

She said that it didn't make sense to her that in Massett, in the heart of one of the richest areas of Indian culture in British Columbia, there was no study of the Haida culture. The course, set up with the help of a \$2,500 grant from the provincial government's First Citizens' Fund and the enthusiastic support of the school trustees in the Charlottes, is very popular.

Both Indian and white students take courses in the Haida language and a group of girls are learning how to make the colorful and extremely rare button blankets. Famed argillite carver Claude Davidson gives weekly demonstrations of his work.

**M**ISS Hyde believes that close involvement with the Indian community is essential if a white teacher is to be a success in the classroom. "It is important to get to know the parents as well as the children," she told a seminar for the student teachers held at Lakelse Hot Springs, south of Terrace, during the practice teaching period.

That seminar, partially funded by the B.C. Department of Education, was a new departure this year, designed to bring the UBC student teachers together for a weekend to talk about their experiences and get some guidance for the remainder of their practice teaching period.

A strong supporter of the course is George Wilson, director of Indian Education for the province. He says one of its main values is giving teachers some idea of what to expect when they get into the classroom.

"In the past we have had a tremendous turnover of teachers — people who have gone into the schools with preconceived ideas of what they were going to achieve. They became disillusioned."

Mr. Wilson says another valuable aspect of the course is that it is preparing B.C.-trained teachers to work in schools with Indian children. "Too often in the past the only people interested in working in these schools were teachers from other Commonwealth countries and most of them didn't work out. Canadian teachers didn't seem very interested."

The UBC program also acts as a screening process for teachers who think that they would like to teach Indian children, but find, through the meetings with resource people and practice teaching, that this isn't really what they want to do, adds Mr. Wilson. "It's much better to catch them before they get into a school situation."

As to the value of the program for Indian children, it will take years to reveal if it has had any impact and even that will be hard to measure, he said. "But if it makes a better learning situation for the Indian children that is all that we can hope to expect."





HAIDA argillite carver Claude Davidson, above, demonstrates his art weekly at a school in Massett in the Queen Charlotte Islands as part of an Indian studies program started by UBC Education graduate Kathy Hyde. The UBC Education student shown below,

chatting with an Indian elementary school student, is one of 32 graduating teachers who last spring spent six weeks in northern B.C. as part of a special program for students who want to teach in Indian schools. Pictures by Michael Tindall.



# Reprieve for UBC Diggers

The Musqueam Indian Band Council has agreed to hold off real estate development of a valuable archeological site on its reserve for one more year to permit UBC archeologist Prof. Charles Borden and a team of diggers to continue exploration of the site.

However, Prof. Borden says that to make the 1974 project a success a total of \$35,000 will be required to pay student excavators, rent pumps and purchase equipment and supplies.

He is appealing to foundations, business interests and interested individuals to donate to a "Musqueam Perishable Artifacts Rescue Fund." "This is a unique challenge to the residents of British Columbia, and particularly those involved in the lumber and wood-fibre industry, because the findings at Musqueam are uniquely related to the early origins of the lumber and woodworking industry in this province," he says.

Prof. Borden predicts that continued excavation of the site near the UBC campus could lead to major finds such as wooden containers, paddles, harpoon and spear shafts and possibly even a canoe.

His prediction is based on the fact that this summer's finds included stone adzes and wedges of various sizes as well as large quantities of wood chips which he says clearly indicate that the occupants of the site were actively engaged in the manufacture of a variety of wooden articles.

Excavation at the site this past summer also uncovered perishable artifacts 2,500 to 3,000 years old preserved in waterlogged silt eight feet below the surface. Dr. Borden calculates that only 20 per cent of the perishable-bearing strata have been exposed so far. (An article on the 1973 explorations appeared in the Sept. 19 edition of *UBC Reports*.)

Those wishing to donate to the fund should make cheques payable to the Musqueam Perishable Artifacts Rescue Fund and send them to UBC's Department of Finance. Donations are tax-deductible.

## Gift of Books

Canada's largest Asian studies library at the University of British Columbia will soon be further enriched with a collection of books valued at \$3,000, the gift of the Japanese Foundation of Tokyo.

The books will be purchased by the Foundation in Japan and will cover a wide range of subjects, including religion, philosophy, fine arts, linguistics, literature and history.

The Foundation is a joint creation of Japanese industry and government. Its aim is to promote the understanding of Japanese culture throughout the world.

Earlier this year the Foundation provided a grant to enable the UBC Department of Asian Studies to conduct a summer program in teaching of the Japanese language.

## Teacher Dies

Mr. Stephen Howard, one of the original members of UBC's School of Rehabilitation Medicine, died suddenly on Oct. 4 after a heart attack.

Born and educated in England, Mr. Howard came to Canada in 1951. He practiced privately and was employed by Shaughnessy Hospital and the Canadian Arthritis and Rheumatism Society before joining the UBC Rehabilitation Medicine School when it opened its doors in 1961.

Mr. Howard was awarded a diploma and a teaching certificate by the Chartered Society of Physiotherapists in England. He held the rank of senior instructor at UBC.

**UBC**  
**REPORTS**

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# Waste Disposal Unit in Operation

The only chemical waste disposal unit of its kind in any university or technical institute in North America is now in full operation on the University of B.C.'s south campus.

The heart of the unit is a chemical liquid waste incinerator. Associated equipment includes an open pit incinerator for burning solids and other "problem" chemicals, and degradation tanks to neutralize corrosive liquids.

Total cost, including a road and land improvements, was about \$150,000.

To comply with pollution control regulations and for safety reasons, UBC had stockpiled its chemical wastes — mostly organic solvents — since June, 1970. The new incinerator went into operation about six months ago and the backlog of waste chemicals has been incinerated.

Organic solvents — the same type of chemicals as cleaning fluid — are burnt in the chemical liquid waste incinerator in a refractory-lined chamber fueled by natural gas. The burning takes place at a temperature of about 2,600 degrees Fahrenheit — hot enough to destroy pesticides such as DDT, should the need arise.

Gases from the burning are cleaned by passing through a water bath, then through water sprays, a de-mister to remove water vapor and a scrubber or separator to remove fine particles before being released into the atmosphere.

## GASES RELEASED

The gases are released at a temperature of about 110 degrees so no steam or water vapor is visible. The gases are virtually 100 per cent oxygen, nitrogen, water vapor and carbon dioxide, some of the major components of natural air.

As the hot gases pass through the water, acids are formed. To neutralize the acids, soda ash is added to the water after the gases have passed through it. Solid particles such as heavy metals are separated out from the water in a settling tank. Then the water is emptied into the sewer system.

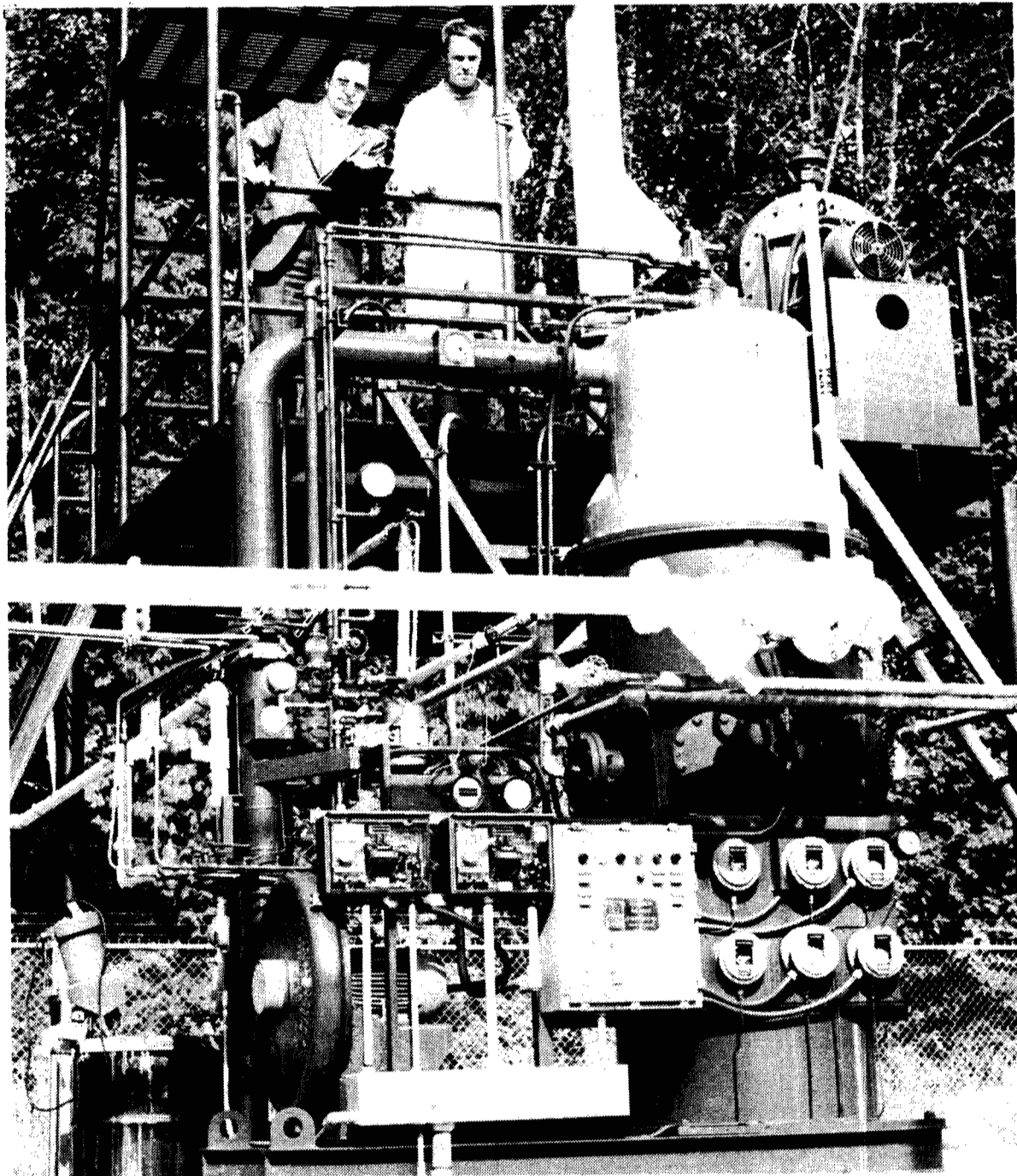
Apart from salts — formed as the soda ash neutralizes the acids — the water is virtually pure.

UBC's operation is under a permit issued by the B.C. Pollution Control Branch. Monthly samples of the gas emission are taken by consulting engineers. Samples of the discharge water are assayed by UBC's Westwater Research Centre.

Samples taken so far show that emissions are well within the limits set by the pollution branch and the Greater Vancouver Regional District.

The capacity of the chemical liquid waste incinerator is about 30 gallons per hour. The incinerator is normally operated two days a week to process UBC chemical wastes. The University is considering processing the wastes of commercial,

industrial and educational organizations in B.C. on a cost basis, with priority going to educational and technical institutions. The unit is under the direction of Mr. William Rachuk, UBC's radiation protection and pollution control officer.



HEART of new \$150,000 chemical waste disposal unit on UBC's South Campus is this chemical liquid waste incinerator. Getting birds-eye view of unit are Mr. William Rachuk, left, UBC's radiation

protection and pollution control officer, and Mr. Mike Allegratti, UBC chemical waste disposal officer and a Master of Science graduate of UBC. Picture by Jim Banham.

Enrolment for the University of B.C.'s 1973-74 Winter Session stood at 20,067 daytime students at the end of September, an increase of 901 students over the final registration figure of 19,166 for the last academic year.

In addition, 1,104 part-time students have registered for evening credit courses offered through UBC's Centre for Continuing Education. Also registered as UBC students, but not included in the official total of daytime students, are 64 interns and 298 residents, medical-school graduates who are completing their training under UBC auspices in B.C. hospitals.

The daytime enrolment increase for the current year is a reversal of the trend of the past two Winter Sessions, which saw enrolments decline from a record of 20,940 daytime students in 1970-71 to last year's figure of 19,166.

Officials in the UBC Registrar's Office expect an additional 300 or so students will register in the Faculty of Graduate Studies. It is likely, however, that there will also be an equal number of withdrawals from the University by students in various Faculties.

When UBC's final enrolment figures are issued on Dec. 1, it is expected that registration will stand in the neighborhood of 20,000 students.

The registration figures reveal that there have been increases in those UBC Faculties which have been hardest hit in recent years by enrolment declines — Arts, Education and Applied Science.

Total registration for degree programs in the Faculty of Arts is up by 135 students to 5,193 and

## Enrolment Trend Reverses

registration in the Faculty of Education is up by 426 students to 3,390. Enrolment in the Faculty of Applied Science totals 1,425, an increase of 100 students over last year. Dr. William Tetlow, associate director of UBC's Office of Academic Planning, says one reason for the reversal of declining enrolment is the return of the "stop-outs" — a term coined by *Time* magazine for high school students who decide to postpone entering university and university students who elect to take a year or more out before completing their degree programs.

Dr. Tetlow's preliminary analysis of enrolment figures reveals that registration has increased by about 300 students each in both first- and third-year programs throughout the University. Total registration for all second-year programs is up by 160 students.

Both Mr. Tetlow and UBC's associate registrar, Mr. Ken Young, note a significant increase in the number of students enrolled for undergraduate programs on a part-time basis. In the last academic year 13.8 per cent of undergraduates were part-time students. This year the figure has risen to 17 per cent, according to Mr. Young.

Both officials attribute the rise to the removal by

many UBC Faculties of *Calendar* regulations which seemed to discourage part-time study. Removal of the restrictions was recommended by a Senate Committee established to investigate the status of part-time students.

Following is a Faculty-by-Faculty total of students registered at UBC as of the end of September. Figures given in brackets are official totals for the 1972-73 Winter Session.

Faculty of Agricultural Sciences — 290 (251); Faculty of Applied Science — 1,425 (1,325); Faculty of Arts — 5,328 (5,193); Faculty of Commerce and Business Administration — 1,288 (1,066); Faculty of Dentistry — 196 (191); Faculty of Education — 3,390 (2,964); Faculty of Forestry — 336 (290); Faculty of Graduate Studies — 2,306 (2,646); Faculty of Law — 634 (607); Faculty of Medicine — 400 (460); Faculty of Pharmaceutical Sciences — 343 (321); Faculty of Science — 3,647 (3,549); Qualifying Year (students preparing to enter Faculty of Graduate Studies) — 175 (163); Unclassified — 309 (140). Grand total — 20,067 (19,166).

Enrolment in UBC's Faculty of Medicine appears to have declined from 460 to 400, but the figures are misleading. Enrolment for the program leading to the M.D. degree actually is up from 274 to 295.

The total given for the Faculty of Medicine includes its School of Rehabilitation Medicine, where enrolment appears to have declined from 186 last year to 105 this year. This is due to the reduction by the School of its former four-year program to three years by eliminating the first year. Students now take their first year in the Faculties of Arts or Science.

UBC's income and expenditure exceeded \$100,000,000 in the last fiscal year.

The University's Consolidated Statement of Fund Transactions, reproduced below, for the fiscal year that ended March 31, 1973, shows that income from all sources totalled \$110,992,185, while expenditures totalled \$100,547,474.

The difference between income and expenditure can be accounted for under four separate headings, Mr. Allen Baxter, UBC's Treasurer, told *UBC Reports*.

1. More than \$5,300,000 in capital funds received during the 1972-73 fiscal year could not be spent in that year. The funds, which are fully committed to capital development, are carried over into the current fiscal year and are spent as construction progresses.

2. A total of \$4,784,021 was carried over into the next fiscal year under the heading "Endowment and Student Loan Funds." This represents additions to capital for endowment and student loan funds. Capital additions are not expendable.

3. A total of \$483,292 was unexpended under the general heading of "Operating Funds - Specific Purposes." This is mainly sponsored and assisted

## University Finances Detailed

research funds which were not spent during the fiscal year for the purposes designated by the donors or granting agencies. The funds will be carried over and expended, as authorized, in a future fiscal year.

4. Under "Operating Funds - General Purposes" the University experienced an operating deficit of \$166,682. It should be noted that the Operating Surplus, which was available to the University for General Purposes, was \$174,760 at March 31, 1973.

Mr. Baxter also revealed the results of a survey carried out by the Canadian Association of University Business

Officers, which compared the percentage allocations of expenditures by 23 Canadian universities with enrolments over 6,000 students. The survey covers fiscal years ending in 1972.

The results show that UBC ranks number one in the percentage of funds allocated for academic and associated academic purposes, such as library, computing and student services. UBC allocates 86.3 per cent of its expenditure for these purposes, the survey showed.

The survey also shows that UBC ranks 23rd, or last, in the percentage of funds allocated for administration, plant maintenance and general expenditures. UBC allocates only 13.7 per cent of its expenditures in these areas.

At the foot of this page is a statement of UBC's Ancillary Enterprise operations for the 1972-73 fiscal year. Only one Ancillary Enterprise - UBC's Oyster River Farm on Vancouver Island - showed a small profit.

Overall, the seven Ancillary Enterprises showed a loss of \$134,682. Footnotes to the table draw attention to special factors associated with the operations of the UBC Bookstore, residences for single students and food services operated in campus residences.

### UBC's CONSOLIDATED STATEMENT OF FUND TRANSACTIONS FOR THE YEAR ENDED MARCH 31, 1973

	OPERATING FUNDS			Endowment and Student Loan Funds	Capital Funds	Total of all Funds
	General Purposes	Specific Purposes	Total			
<b>Income</b>						
Operating and Capital Grants - Canada	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Health Sciences Centre	-	-	-	-	1,457,518	1,457,518
Museum of Man	-	-	-	-	2,498,287	2,498,287
TRIUMF Project	-	-	-	-	4,826,145	4,826,145
- British Columbia	58,500,000	-	58,500,000	-	6,000,000	64,500,000
Health Sciences Centre	-	-	-	-	56,732	56,732
Asian Studies Centre	-	-	-	-	400,000	400,000
Student Fees	9,796,515	-	9,796,515	-	-	9,796,515
Services	2,388,423	1,473,902	3,862,325	-	-	3,862,325
Endowment Income	-	1,115,254	1,115,254	1,065,359	-	2,180,613
Sponsored or Assisted Research	-	13,779,439	13,779,439	-	-	13,779,439
Gifts, Grants and Bequests	-	2,231,115	2,231,115	2,767,065	1,378,833	6,377,013
Miscellaneous	490,110	136,934	627,044	-	630,544	1,257,598
<b>Total Income</b>	<b>\$71,175,048</b>	<b>\$18,736,644</b>	<b>\$89,911,692</b>	<b>\$ 3,832,424</b>	<b>\$17,248,069</b>	<b>\$110,992,185</b>
<b>Expenditure</b>						
Academic	\$51,585,487	\$ 2,123,653	\$53,709,140	\$ -	\$ -	\$ 53,709,140
Library	5,393,525	102,027	5,495,552	-	-	5,495,552
Sponsored or Assisted Research	( 239,826)	13,185,486	12,945,660	-	-	12,945,660
Administration	2,539,596	7,240	2,546,836	-	49,750	2,596,586
Student Services	1,083,025	335,062	1,418,087	-	-	1,418,087
Plant Maintenance, including Renovations and Alterations \$2,178,134 (1972-\$1,647,399)	9,746,576	188,869	9,935,445	-	-	9,935,445
Fellowships, Scholarships and Bursaries	931,242	1,413,199	2,344,441	-	-	2,344,441
General Expenses	167,423	34	167,457	1,185	49,153	217,795
Land, Buildings and Equipment	-	-	-	-	11,750,086	11,750,086
<b>Total Expenditure</b>	<b>\$71,207,048</b>	<b>\$17,355,570</b>	<b>\$88,562,618</b>	<b>\$ 1,185</b>	<b>\$11,848,989</b>	<b>\$100,412,792</b>
Ancillary Enterprises (Net)	134,682	-	134,682	-	-	134,682
	<b>\$71,341,730</b>	<b>\$17,355,570</b>	<b>\$88,697,300</b>	<b>\$ 1,185</b>	<b>\$11,848,989</b>	<b>\$100,547,474</b>
Excess of Expenditure over Income for the year ended March 31, 1973	\$ 166,682	\$ -	\$ -	\$ -	\$ -	\$ -
Net Additions to Fund Balances	-	1,381,074	1,381,074	3,831,239	5,399,080	10,692,467
Reclassification of Funds	-	( 897,782)	( 897,782)	952,782	( 55,000)	355,000
Fund Balances at April 1, 1972	341,442	8,805,231	9,146,673	19,373,845	9,266,900	38,733,131
Fund Balances at March 31, 1973 as per Statement of Financial Position	<b>\$ 174,760</b>	<b>\$ 9,288,523</b>	<b>\$ 9,463,283</b>	<b>\$24,157,866</b>	<b>\$14,610,980</b>	<b>\$44,672,149</b>

### STATEMENT OF UBC's ANCILLARY ENTERPRISE OPERATIONS FOR THE YEAR ENDED MARCH 31, 1973

	University							Total All Sources
	Bookstore	Campus Food Services	Residences Food Services	Housing Services Single	Housing Services Family	Health Service Hospital	Farm Oyster River	
<b>Income</b>								
Sales	\$1,988,735	\$1,141,906	\$ 194,177	\$ 25,007	\$ 63,216	\$ -	\$193,893	\$3,606,934
Rentals and Meal Passes	-	43,394	844,401	1,965,160	505,133	-	2,310	3,360,398
Hospital Revenue	-	-	-	-	-	177,323	-	177,323
	<b>\$1,988,735</b>	<b>\$1,185,300</b>	<b>\$1,038,578</b>	<b>\$1,990,167</b>	<b>\$568,349</b>	<b>\$177,323</b>	<b>\$196,203</b>	<b>\$7,144,655</b>
<b>Expenditure</b>								
Cost of Merchandise Sold	\$1,709,586	\$ 433,342	\$ 561,725	\$ -	\$ -	\$ -	\$ -	\$2,704,653
Salaries and Wages	315,262	505,950	391,039	554,717	66,624	139,954	81,513	2,055,059
Fringe Benefits (including Board Allowance)	15,755	29,558	21,852	23,448	3,282	6,128	5,938	105,961
Dietary Service	-	-	-	-	-	21,328	-	21,328
Utilities	11,958	-	19,410	196,467	67,584	2,851	7,223	305,493
Other Operating	72,821	66,386	43,327	265,277	92,887	17,125	89,501	647,324
Development of Facilities	-	-	-	26,988	15,613	-	-	42,601
Debt Repayment, including interest	-	150,064	45,533	753,091	280,157	-	-	1,228,845
	<b>\$2,125,382</b>	<b>\$1,185,300</b>	<b>\$1,082,886</b>	<b>\$1,819,988</b>	<b>\$526,147</b>	<b>\$187,386</b>	<b>\$184,175</b>	<b>\$7,111,264</b>
Net Operating Margin for Year	(\$ 136,647)	\$ -	(\$ 44,308)	\$ 170,179	\$ 42,202	(\$ 10,063)	\$ 12,028	\$ 33,391
Reserved for Future Debt Repayment	\$ -	-	(\$ 44,308)†	\$ 170,179†	\$ -	\$ -	\$ -	\$ 125,871
Reserved for Maintenance and Contingencies	-	-	-	-	42,202	-	-	42,202
Excess of Income over Expenditure for the Year Ended March 31, 1973	<b>(\$ 136,647)*</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>(\$ 10,063)</b>	<b>\$ 12,028</b>	<b>(\$ 134,682)</b>

\* The Bookstore had an operating deficit of \$136,647 due to the write-off of currently non-saleable, non-returnable obsolete text books in the amount of \$208,805. The stock is now valued at the lower of cost or net realizable value.

† Single Residences and Food Services realized a net margin of \$125,871 which was occasioned by the deferment of the first semi-annual payment to Central Mortgage and Housing Corporation on Stage II of the Walter H. Gage Residence. These funds will aid in financing an anticipated deficit of \$500,000 in the next three years.



# UBC ALUMNI Contact

PREPARED FOR UBC REPORTS BY THE UBC ALUMNI ASSOCIATION

UBC ON TV  
9:30 p.m., Thursdays,  
Cable 10, in Vancouver



Another student gets registered at UBC's Tutorial Centre by Co-ordinator David Radcliffe.

## Bremer To Get Alumni Brief

The UBC Alumni Association is preparing a brief for submission to the task force on changes in the *Universities Act*, which is chaired by Mr. John Bremer, B.C.'s Commissioner of Education.

An Alumni Association committee on higher education has been formed, under the chairmanship of Alumni past president Frank C. Walden, to examine the need for reform in university government and to present an Alumni viewpoint before the new year.

University government is expected to be an important focus of the work of the task force, which is officially called the Committee on University Governance. It was established Aug. 23 by the Minister of Education to examine "the internal and external forms of running universities, with particular emphasis on the relationship between the government and universities."

"There is an apparent interest in getting broader representation in university government, but it would be a grave mistake if this was done at the expense of the alumni representation presently set out in the *Universities Act*," said Mr. Harry Franklin, Alumni Association executive director. "We're the informed lay people with a more than passing interest in the educational process. Faculty may come and go, students may come and go, but the alumni are the one constant in the university community."

The Alumni Association has prepared submissions on university government on two previous occasions. In 1967 the Association presented a brief to the University which recommended:

A single advisory board of higher education for B.C. replacing the two existing boards, one financial and one academic;

Retention of the office of Chancellor;

Retention of the President as a powerful, central figure in the University, but provided with administrative assistants;

An increase in the size of the Board of Governors with faculty representation; and

A reduction in the size of Senate.

In 1968, the Association submitted a brief to the government-appointed Perry Commission on inter-university relations. The main recommendations called for establishment of a single co-ordinating agency for B.C.'s universities with lay and academic representation and a full-time executive director. The agency would essentially analyze future educational needs, determine academic and financial priorities of the universities, allocate funds from the government and co-ordinate admission and transfer standards.

## Rowers to Meet

A reunion for all those involved in the "Golden Era" of UBC rowing will be held at UBC on Nov. 23.

Officially, it will be the third UBC-Vancouver Rowing Club reunion of oarsmen, officials and supporters from the years 1954, 1955 and 1956 — the era when UBC first emerged as a power in world rowing. That was the era, in case you've forgotten, when UBC's eight-oared crew won a British Empire Games gold medal in 1954, placed second in the Henley Regatta in 1955 and won a silver medal at the 1956 Olympics, while UBC's coxless fours took the gold medal in their Olympic division.

Special guest at the reunion will be B.C.'s Lieutenant-Governor, the Hon. Walter Owen, who served rowing well during that period as chairman of a fund-raising committee.

The reunion will be held in UBC's Graduate Student Centre on Friday, Nov. 23, beginning with a reception at 6:30 p.m., followed by dinner at 8 p.m. Tickets at \$10 each may be obtained by contacting the UBC Alumni Association, 6251 N.W. Marine Drive, Vancouver 8, B.C. (228-3313).

Picture by John Mahler

## UBC TUTORIAL CENTRE

When the slogging gets tough in that second-year course in chemistry or that first-year course in Chinese, where can a bewildered student turn for help?

The first resort, of course, is the teaching staff. But for many students, particularly those on campus for their first or second year, faculty and teaching assistants sometimes seem remote, or the student has more of a problem with his subject than he thinks can be resolved in a simple visit to a prof's office.

As an alternative, more and more students are turning to the UBC Tutorial Centre.

The Centre, which was started four years ago, is really a clearing house of sorts. It takes the names of students who are having problems in particular fields and matches them with graduate students and senior honors undergraduates who are willing to be tutors.

Those seeking help are charged a \$1 registration fee to help defray the cost of operating the Centre, but after that all financial arrangements are between the student and his tutor, whose fees can range anywhere from \$3 to \$7 per hour depending on his expertise and the level of teaching required.

"About 50 per cent of the students who come to us are looking for help with first- and second-year courses in math and the sciences," says David Radcliffe, co-ordinator of the Centre.

He searches for tutors at the beginning of the school year by sending letters to all grad students (this year, about 2,000 of them) at UBC, and then, during the term, he contacts specific departments within the University as the need for tutors in special areas becomes known.

"Centre" conjures up images of a structured establishment. In this case, not so. Radcliffe is a fourth-year Arts student, his "office" is a small desk positioned outside SpeakEasy on the main concourse of the Student Union Building. The \$1 registration fee, plus a \$700 allocation from the UBC Alumni Association, pays Radcliffe for manning the desk from 12:30 to 2:30 p.m. daily, and for the Centre's advertisements, which appear in *The Ubysey*.

Radcliffe says that so far this year 50 students have approached the Centre looking for tutors. Last year more than 200 used its service.

"There's a heavy crunch at mid-term and exam

times," Radcliffe explains, and that's when the Centre's resourcefulness in finding teachers is taxed to its limit. Tutors often have exams to face themselves, so their available time is cut.

"People who sign up with us early generally get help quite regularly, and that's most effective," he says. As in most things, the problem is easier to correct when tackled early, and the Centre urges students to register as soon as possible if they're in difficulty.

"Then there are the ones who come in and say 'I have a mid-term on Friday and I need help.' That's usually on Wednesday and I'm supposed to find them somebody," Radcliffe says in dismay.

He says there is a constant need for tutors in all fields and particularly in chemistry and some languages. Occasionally he is asked to find people with expertise in areas not covered by University departments. Some Vancouver high schools also refer their students to the Centre, increasing the demand for assistance.

The result is a continual struggle to find qualified people to do tutoring, but in most instances the Centre is successful in meeting students' requirements. In the long run that means less frustration for all concerned — and better grades.

## First Award

Robert D. Menzies, a fourth-year medical student, has been named the first recipient of the \$700 Harry T. Logan Memorial Scholarship.

The annual award, made to a student entering third or fourth year who has a good academic standing, achievement in sport and participation in other student activities, is named in honor of the late Prof. Logan, who died in 1971 at the age of 83. Prof. Logan was one of the original faculty members when UBC opened its doors in 1915. He taught in the Classics Department, of which he was head from 1949 to 1954, until his final retirement in 1967 at the age of 80.

The UBC Alumni Fund organized the campaign which has already raised more than \$15,000 to establish this scholarship in perpetuity.