

SENATE REACHES IMPASSE

Editor, UBC Reports

UBC's Senate has reached an impasse in discussions of proposals for enrolment restriction contained in the report of its Committee on Long-Range Objectives.

Having set overall limits on the numbers of students who will be able to attend UBC in the future, Senate has now balked at making firm decisions on exactly how the enrolment limitation is to be applied throughout the University.

Here is what the Senate, at its meeting on Feb. 7, and the Board of Governors, at its meeting on Tuesday, have approved:

 Limitation of the total undergraduate enrolment on the present UBC campus to a maximum of 22,000, and

- Limitation of the annual rate of increase of enrolment in graduate studies to 15 per cent and a maximum enrolment of 5,500 graduate students.

NET INCREASE EXPECTED

Earlier in the present session Senate passed a proposal, also approved by the Board, to limit to 3,400 the number of students to be admitted to the first year for the first time in September, 1970. This will reduce by some 300 students the number entering the first year, but UBC still expects a net increase in enrolment as a result of increases in other years.

The Senate debate has broken down on the question of how the rate of growth of enrolment should be limited.

At its meeting on Feb. 25, Senate debated Recommendations 2, 3 and 4 of the Committee on Long-Range Objectives. The upshot of the debate was the tabling of all three recommendations.

There had already been hints that Senate might

100,000 EXPECTED

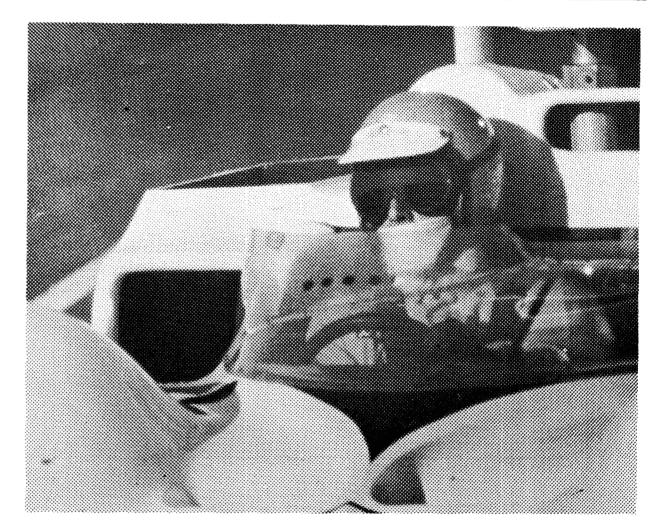
UBC's Open House committee is expecting more than 100,000 visitors to the campus tomorrow and Saturday.

Faculty members and students are putting finishing touches on hundreds of displays and exhibits for the triennial event which officially begins at 3 p.m. tomorrow.

B.C.'s Lieutenant-Governor, the Hon. John Nicholson, will declare the campus officially open to visitors at a short ceremony at 3 p.m. tomorrow at the base of the flagpole at the north end of the Main Mall.

The carillon in the Ladner Clock Tower will serenade early visitors to the campus immediately following the opening ceremony. Other carillon concerts are planned during Open House.

The official hours of Open House are 3 to 10 p.m. tomorrow and 10 a.m. to 10 p.m. Saturday. All lectures and laboratories are cancelled after 12:30 p.m. tomorrow to allow students to take part in the event.



DRIVER IN HALF-TONE was judged one of the top four black and white prints in the Ben Hill-Tout Memorial Photographic Salon, which is on display in the Student Union Building art gallery until March 15. The picture was taken by Bill Allen, a second year Arts student at UBC. The Salon also includes color prints and slides.

Food Prices Boosted

An average increase of about 20 per cent in prices in campus food outlets was approved by the Board of Governors on Tuesday.

The increased prices, which will apply to almost all items sold in campus cafeterias and snack bars, will be effective May 1.

The cost of meals to resident students, included in their room rates, remains unchanged.

The increased cost of food, a ten-per-cent increase in labor costs and a jump in general operating expenses are the reasons for the campus food prices increase. There are currently seven food outlets of varying sizes on the campus employing about 400 persons.

These outlets are the Ponderosa cafeteria on West Mall, the Bus Stop snack bar, the cafeteria in the Student Union Building, the lunchroom in the old Auditorium, the snack bar in the War Memorial Gymnasium, the Barn snack bar on the Mall and the snack bar in the Buchanan Lounge.

EXAMPLES ON / EN

scrap Recommendation 2 of the report, which calls for raising UBC's entrance requirements to 65 per cent, effective for the session 1970–71.

For one thing, Senate had already done much the same thing by limiting first-year intake to 3,400, which is estimated to be the number of entering students with averages of 65 per cent or better.

PLAY HAVOC WITH ENROLMENTS

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Dean of Science Dr. W.D. Liam Finn had also told Senate at its meeting on Feb. 7 that a 65 per cent entrance standard would play havoc with the enrolments in some Faculties and Schools by eliminating large numbers of students.

Dean Finn asked formally that the recommendation be tabled at the Feb. 25 meeting and Senate agreed.

He pointed out that since 1965, 50 per cent of the students who have enrolled at UBC have not completed their degrees, a situation which he *Please turn to Page Four*

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The increase was discussed and approved by the Student-Faculty Advisory Committee on Food Services and recommended to the Board by Mr. J.F. McLean, director of UBC's Ancillary Services and Miss Ruth M. Blair, Director of Food Services. UBC's Ancillary Services are self-supporting services operated by the University. Provincial government policy requires the University to generate sufficient net revenues from these services to repay the costs of developing the services.

COSTS MUST BE MET

As a result, UBC's Food Services must meet the costs of operation including purchase of food supplies, staff salaries and heat and light bills as well as the capital costs of providing food outlets, out of the revenues generated through the sale of food to students and faculty members.

EXAMPLES GIVEN

Some examples of price increases which will come into effect May 1 are as follows:

Coffee – up from 10 cents to 15 cents; milk – from 12 cents and 24 cents to 15 cents; milk – from 12 cents and 24 cents to 15 cents; and 25 cents; soft drinks – from 10 cents to 15 cents; entree – prices remain fixed at 65 cents but bread and butter will not be included; soup – from 15 cents to 18 cents; bacon, eggs and toast – from 70 cents to 85 cents; hamburger – 35 cents to 45 cents; grilled cheese sandwich – 25 cents to 30 cents; French fries – 15 cents to 20 cents; lettuce and tomato sandwich – 25 cents to 30 cents; egg sandwich – 25 cents to 30 cents; ham sandwich – 35 cents to 45 cents; cinnamon bun – 13 cents to 15 cents; muffins, donuts and tarts – from 8 cents to 10 cents; pies – 25 cents to 30 cents.

Next week *UBC Reports* begins a two-part series on Food Services by Assistant Information Officer Doris Hopper.

DEAR PROFESSOR:

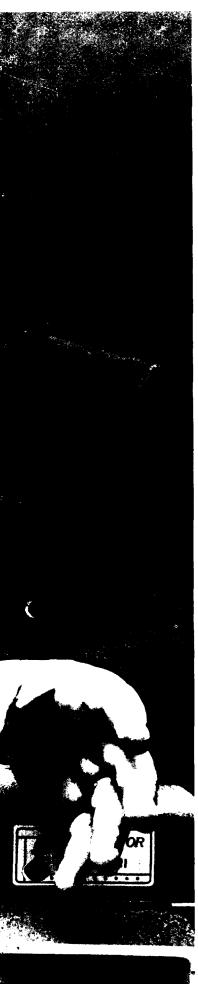
Are you bored with teaching the fundamentals of your discipline to freshman students? Do you share the view of many students that large classes can be frustrating for both parties and offer a less-than-ideal learning environment? Would you welcome the opportunity for more seminar time and closer contact with students?

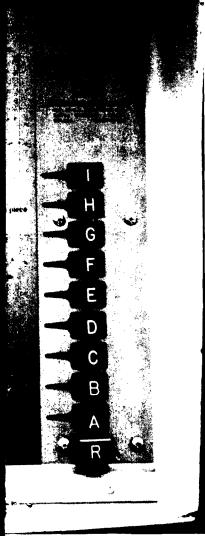
Programmed instruction may be the answer to these problems, according to educational psychologist Dr. Stanley Blank, pictured at right with one of the teaching machines in his education building laboratory.



Dr. Blank and his associates in education have even put programmed learning to work in one of the faculty's courses-Educational Psychology 301-and reduced lecture time by two weeks.

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ROBLEMS of overcrowding and a lack of meaningful contact between students and instructors are common to any large campus and there is no obvious panacea at hand. Conventional solutions range from construction of more and varied kinds of lecture space to noon-hour and evening class scheduling and limitations on course enrolment.

Dr. Stanley Blank, an educational psychologist in the University of B.C. Faculty of Education, believes there is yet another solution-programmed instruction-which would do much to alleviate some of the problems described above.

"Proper use of programmed instruction would eliminate the need for large lectures, free professors for more seminar participation and permit a closer learning relationship between the student and the instructor," he says.

"I am convinced that programmed learning will become one of the really formidable teaching tools of the future. It will allow us to teach just as well and much faster than by the methods now in use."

What is programmed instruction?

According to one definition it is the process of arranging the material to be learned in a series of sequential steps; it usually means that the student moves from a familiar background into a complex and new set of concepts, principles and understandings.

The basic concept of programmed instruction seems simple and the technique of organizing material in a logical and progressive fashion sounds little different from the process followed by any competent professor in preparing lecture material.



UT there are a number of basic differences. Programmed instruction is a process of self-tuition in which the student proceeds at his own pace; he learns all the material designed into the program and not selectively and subjectively as from a textbook or lecture notes; and the material contained in the program is scientifically designed and tested to suit his intellectual capacities. "populations," slow learners, the average student and exceptionally bright, creative students. Programs must be designed to meet the needs and intellectual capacities of each group.

For example, a program designed for slow learners would use a rigid, step-by-step linear approach and a program for bright students would require a branched, open-ended design providing the student with more opportunity for independent choice.

"Any subject in which you can identify a body of basic factual information is amenable to programmed instruction," Dr. Blank says. "Subjects where high-level conceptual exercises or certain kinds of reasoning are involved are not suited to this technique."

Some of the subjects to which programmed instruction has been applied at universities include physics and chemistry, geography and American government.

An example of its use at UBC is a course subtitled Educational Psychology 301, in which descriptive statistics are programmed and in which the lecture time required for the course has been reduced by two weeks.

HE equipment or "hardware" in use at the UBC programmed instruction centre in the Faculty of Education ranges from a fairly sophisticated auto-tutor machine worth several thousand dollars to \$5 teaching machines which are composed simply of a cardboard box with information on a revolving cylinder viewed through a peephole.

The auto-tutor carries information on microfilm and students can select a variety of program options by punching different keys on the machine.

Another machine, the MTA scholar, is also electronic but provides more basic programs than the auto-tutor. It has the advantage of portability and can also be connected to slide and movie projectors for co-ordinated operation.

Dr. Blank hopes a remote teletype terminal linked to the main UBC computer will be installed in the instruction center next fall and will be used to experiment in the use of computers for programmed instruction.

"In designing a program you first of all determine the end product. You assess the prior knowledge which the student has and the goal which you wish to attain. You determine the conceptual steps the student must advance through to attain this knowledge and how big a conceptual step the student can take on his own," Dr. Blank says.

"Once you have sequenced and designed a program you try it out with a test group and make any changes necessary on the basis of results until you get the program the way you want it."

Dr. Blank points out that programmers are dealing basically with three student

"Programmed instruction offers tremendous potential and there will be almost no limit to the possibilities in the future when we can use computers," he says.

"At the moment, there is a lack of appreciation by instructional staff of the potential value of this teaching tool and private industry is far ahead of universities in the use of programmed instruction."

Dr. Blank first became interested in programmed instruction while studying for his master's degree at UBC in 1959–60. He continued research in the field while taking his doctorate in human learning at the University of California.

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Board Lets Contract

The University of B.C.'s Board of Governors awarded a \$794,305 contract to Narod Construction Ltd. Tuesday to build an extension to the Faculty of Pharmaceutical Sciences' George Cunningham Building.

The addition will cover about 24,000 square feet gross and will be four stories high, the same as the existing building. It will abut the east end of the existing building so that existing floors will join the centre of corresponding floors of the addition to form a "T."

Narod was lowest of seven companies which bid on the project. The highest bid was \$843,000.

Half the building costs will come from the federal Health Resources Fund. The other half will come from the University's capital budget.

The extension has been integrated into plans for UBC's Health Sciences Center, a complex of buildings including three basic science buildings, the Woodward Biomedical Library, a new

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characterized as a waste of resources and human potential.

Raising admission standards, he said, even though there was a correlation between entrance marks and failure rates, was a facile solution and more attention should be paid to guiding and counselling students and improving instruction.

In its report, the Long-Range Objectives Committee said raising standards to 65 per cent would not be enough to restrict enrolment to the proposed limits. For long-term effectiveness the committee recommended restricting enrolment for a five-year period in the first two years of Arts, Science, Education, Agricultural Sciences and Physical Education and Recreation, and in the first year of Commerce, commencing in the fall of 1971.

In placing this recommendation before Senate on Feb. 25, Dean Finn omitted Agricultural Sciences from the motion. He said that Faculty had been included in the original recommendation to keep before Senate the fact that certain programs, offered exclusively at UBC, could be used as an entry route to other programs such as Science, where enrolment is restricted.

This led to Dean of Commerce Philip White proposing an amendment to delete any reference to his Faculty from the motion, to Dean of Science Vladimir Okulitch pointing out that only UBC's Science Faculty offers work in geology and geophysics and to Prof. Robert Osborne, head of the School of Physical Education and Recreation, pointing out that his discipline is also exclusive to Point Grey.

Dr. Robert Clark, UBC's academic planner, said that Dean Finn had proposed a major change from the recommendation brought forward by the committee, and moved an amendment to restore Commerce to the motion.

The obvious confusion and uncertainty that seemed to exist in the minds of most Senators was resolved with the tabling motion.

That done, there was no alternative but for Senate to table Recommendation 4 which proposed that, to implement the quota system embodied in the previous motion, enrolment be limited on the basis of academic ability and not on the basis of geographic origin or previous educational institution. psychiatric unit, the John Barfoot Macdonald Dentistry Building and the Wesbrook Building at the corner of University Boulevard and East Mall.

A 360-bed teaching hospital and Instructional Resources Center for integrated teaching of students in the various health professions will also be built.

Construction of the Pharmacy addition is scheduled to begin this month with completion by the end of the year. It will be mostly used for graduate research work. Increased enrolment in the Faculty has meant greater use of the existing building for undergraduate teaching and laboratory work.

The existing building, named after a former chairman of UBC's Board of Governors, was built in 1959 and covers 26,500 square feet gross.

Architects for the two buildings and the Health Sciences Centre are Thompson, Berwick, Pratt & Partners.

Some guidance may come from a report to be prepared by a new Senate committee established as a result of a motion by Prof. Gideon Rosenbluth of the Economics Department.

The new committee, which is to report in Feb., 1970, will propose "minimum standards for the physical, financial and academic resources per student required to maintain the quality of education at UBC" and will "propose a schedule of maximum and optimal class sizes for the various courses at the University."

Each Faculty of the University will be required to report to the committee on the physical, financial and academic resources per student and the maximum size of classes required to maintain the quality of education in the faculty.

The minimum standards to be prepared by the committee will be those prevailing at "good universities" in such matters as student-staff ratio, library space per student, books per student, laboratory space and equipment per student and class size.

When standards have been developed, Dr. Rosenbluth told Senate, they can be compared to a survey of actual facilities and with information about operating and capital grants available.

The establishment of standards was a prerequisite, he said, to persuading the provincial government to agree to a system of formula financing.

Prof. Clark pointed out the results of Senate's inability to come to grips with the question of limiting the enrolment growth rate:

It raised doubts in the minds of other institutions about UBC's entrance standards, and

 It made difficult the question of deciding on building priorities since no faculty could be certain about the number of students it would enrol in future years.

Physicist Speaks

Professor Robert S. Cohen of Boston University's Physics Department will speak on the "Sociological Roots of Science" today at 12:30 p.m. in the Hebb Theatre.

Prof. Cohen is visiting UBC as a Koerner Lecturer under the auspices of the Leon and Thea Koerner Foundation.



KARL BURAU

Karl Burau Denies He's Leaving UBC

Karl Burau is not leaving UBC, despite an editorial in *The Ubyssey* which says he is.

"I told them I was frustrated with the way things were going," he said, "and that I *might* leave the University, but I have no definite plans to do so at present," Mr. Burau told UBC Reports.

The editorial announcing that Burau was leaving the campus was signed "P.K." and appeared in the edition of Feb. 24.

Mr. Burau has struggled in recent years to establish a viable "Experimental College" or "Free University" designed "to complement the courses offered by the establishment."

Another general aim of the College, Mr. Burau said, was to promote intellectual confrontation. "I had hoped to involve some 100 students who would function as a pressure group to promote a bill of rights based on natural law, which would include a guaranteed annual income," he said.

The Experimental College operated as a quasi-independent organization sponsoring noon hour lectures until this year when it was reconstituted as a student club by the Alma Mater Society. Mr. Burau is honorary president of the club.

In the current year it has been faced with dwindling audiences, but despite this Mr. Burau plans to stage two more sessions of the College.

On Wednesday, March 11, the College will meet in room 125 of the Student Union Building at 12:30 p.m. to hear Mr. Burau and several UBC professors

The question lurking in the background of the debate was stated by Registrar J.E.A. Parnall, who is also secretary of Senate.

Senate, he said, should give serious consideration to the question of whether or not UBC wishes to retain its uniqueness at the first- and second-year level in the light of the fact that some other post-secondary institutions are now offering some of the same programs.

Both Applied Science and Commerce should consider admitting students after two years in a regional college, he said, and this may be the kind of future UBC should be planning for, instead of admitting at the first-year level.

UBC, he added, "won't live long" if students have to have 85 per cent to get into Arts and 60 per cent to get into Agriculture.

It may be a year before Senate returns to the question of how the rate of growth in enrolment is to be limited.

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His academic background bridges science and philosophy. He graduated from Wesleyan University in Middletown, Conn., with a Bachelor of Arts degree in 1943. He took his Master of Science degree in 1943 and Ph.D. degree in 1948 from Yale University.

He has written several papers on general education in science and the social order and concept and theory formation in the physical sciences.

He is currently serving on the Emergency Civil Liberties Committee of the National Association for the Advancement of Colored People.

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Participating in the session, in addition to Mr. Burau, will be Dr. Robert M. Clark, Dr. Russell Robinson and Dr. David Bond, all of the Department of Economics.

On March 18 Mr. Burau plans another session of the College to discuss university reform. The meeting will again be held in SUB 125 at 12:30 p.m.

Mr. Burau said he had applied to Students' Council and the Alumni Association for funds which would enable him to publish a book which advocates a bill of rights for Canadians based on "natural law."

He claims the existing Canadian bill of rights is "not worth the paper it's written on" because it can be withdrawn at any time, it does not supersede provincial legislation and the courts don't have to take it into account if they have guidance from case law.

A real bill of rights, he said, would be postulated as natural law and would be part of the Canadian constitution. It would include the right to work and the right to a guaranteed annual income.