

UBC REPORTS

Vol. 14, No. 8/Nov., 1968/Vancouver 8, B.C.

RETURN POSTAGE GUARANTEED

THE LOOMING NUMBERS CRISIS

If UBC continues its present admission standards, the University will enrol more than 34,000 students in 1973—a 70-per-cent increase over present campus enrolment. Some of the implications of this looming numbers crisis were spelled out for the UBC Senate recently in a report on academic building needs, which revealed, among other things, that UBC needs at least \$108 million for buildings in the next five years. This issue of *UBC Reports* contains a selection of the wide range of opinion within the University about the numbers crisis. The report begins on Pages Two and Three.



UBC FACES UP TO THE NUMBERS CRISIS

Senate Reports Pose the Problem

By T.A. Myers,
Director of Information Services, UBC

The University of B.C., already strained in its efforts to accommodate its 20,000 present students with inadequate operating funds, faces the alarming possibility of a 70-per-cent increase in enrolment over the next five years.

This would mean 34,371 students on the UBC campus in the fall of 1973.

Think what the University would be like with a student body of that size: bigger and bigger classes. Ever-longer lineups at bookstores, libraries, cafeterias, bus stops. More and more cars crammed into increasingly distant parking lots. More competition for scarce housing for faculty and students. Increased compartmentalization and depersonalization of the University, resulting in even more complete alienation of the students.

This is what the numbers crisis means to UBC. This bleak picture will become reality, unless . . .

. . . Unless massive capital funds are provided for a crash building program at UBC.

. . . Unless UBC sharply raises its admission requirements, or by some other means slows the flood of new students onto the Point Grey campus.

. . . Unless UBC is restructured, perhaps on the "cluster college" model, to accommodate masses of students in a more congenial environment.

. . . Unless a fourth university is established quickly in B.C.

. . . Unless the burgeoning community colleges succeed in fulfilling the educational needs of a large segment of our youth.

These are not necessarily alternative solutions. They may all be necessary if British Columbia's system of higher education is to survive the challenge of the 1970's.

The challenge to UBC was clearly posed in a statistical report of the Department of Academic Planning, presented to the University Senate Oct. 30.

The report provided year-by-year and faculty-by-faculty forecasts of increased enrolment for the next five years.

This year's total enrolment is something over 20,000; a final figure is not yet available.

Unless UBC changes its admission policy, the report said, it can expect to have 22,368 full-time winter session students next year.

For the following year, 1970-71, the forecast is 25,158 students. For 1971-72, it is 28,430. In 1972-73, there would be 31,559 students, and for the winter session of 1973-74 the forecast is 34,371 students.

The basic admission standard at UBC now is graduation with a 60-per-cent average from the academic-technical program of the B.C. high schools, or equivalent qualifications. It must be stressed that the planners' forecasts for UBC enrolment are based on the assumption that this standard will be maintained for the next five years.

But President Kenneth Hare told the Senate, when the forecasts were discussed, that it was "quite apparent that there will have to be a change" in the University's admission policy because "these figures imply an impossibility for us."

The numbers crisis, of course, is a result of the "baby boom" of the 1950's. The babies of that time are now moving through the province's high schools, and an ever-increasing proportion of them are aiming toward a university or college education.

Please turn to page seven
See MYERS



We're Getting Close to the Limit

Dr. Robert Stewart, a member of UBC's Senate and professor of oceanography, explains why an enrolment of 34,000 students would be undesirable, even if operating funds and adequate buildings were available.

There are clearly some advantages in having a large student enrolment because there are some things that can be done in a large university which can't be done in a small one.

I think many faculty members feel UBC's optimum size is somewhere near our present enrolment and that any growth beyond this is less than desirable. I don't think there's any chance of freezing enrolment at present levels, but to extend it by another 70 percent, which is contemplated in the projections which have come from the academic planning office, puts us beyond what I consider to be the best balance in numbers.

Some of the advantages of bigness are that you can do things in more variety and experts are available to cover almost any field. This has been one of the advantages which has accrued to UBC as a result of expansion in the past decade. This is certainly a better university than it was, simply because we've got more and better people on the faculty.

But there comes a time when the advantages are outweighed by the disadvantages. For one thing, and I feel very strongly on this point, it should not be possible to find all the contacts you need within the group that is working on the same problems. It should be necessary for the faculty member, a physicist say, to move outside his immediate environment as far as personal contacts are concerned. In other words, it's become too easy to be narrow.

There are other disadvantages to bigness. The place gets unwieldy as far as management is concerned and there are too many steps between individual faculty members, students and senior administrators. I think this leads to a sense of inertia and helplessness—a feeling that the institution is so large that you can't move it. The numbers we now have are causing trouble at the student and junior faculty levels and there is a feeling that nothing can be done about it. These feelings can only be accentuated with a growing enrolment.

There's also the question of sheer physical size. It's becoming harder to get from one place to another and already we've had to extend the interval between lectures from seven to ten minutes. We could crowd our buildings together, but this would mean losing the green, open spaces on the campus, which I think are more than an amenity and contribute to people's attitude toward the place.

We could build the campus up, of course, but

Please turn to page seven
See STEWART



The Crisis for Graduate Studies

Prof. Ian McTaggart-Cowan, dean of UBC's faculty of graduate studies, points up a number of problems for graduate studies arising out of enrolment predictions.

The continuation of our present enrolment policy to 1974 will see 34,000 students on the University of British Columbia campus.

At the same time we are painfully aware that we are already almost over-whelmed by the task of providing a worthy university education for 20,000 students in facilities that, except for classrooms, became seriously deficient three years ago with only 15,000 students.

In the face of this numbers problem it is almost impossible to get at the task of improving the kind or quality of education we provide, or to look forward to new achievements consistent with the opportunities and responsibilities that UBC has in the provincial system of education. When just coping becomes a major preoccupation you have lost control of objectives and direction.

Confronted with present inadequacies of space and the inevitable flood of new aspirants for places in the university, Senate has decided to proceed at once with the planning of four large buildings designed specifically to meet the crisis in numbers of undergraduates in arts, science and law.

This is a decision that gives me most serious concern. It seems to be based upon the assumption that the three existing provincial universities alone must meet the crisis. It seems further to assume that our present policy of accepting all those who meet our present entrance requirements is inevitable, and it seems to overlook the consequences of such assumptions for the kind of university we have become.

Surely there is no more urgent priority than that of examining these assumptions and their consequences and of establishing new, clearly defined policies on enrolment, the direction of our academic development and tolerable rates of growth. The point is that a policy on numbers and the response to numbers at the provincial level is urgent and must precede intelligent decisions on each of the present campuses. But the framing of provincial policy requires each of the present institutions to establish its own goals within the total complex.

For the next year or two the existing universities have to cope with the numbers seeking entry, since

Please turn to page seven
See COWAN

THE SUDDEN CONCERN ABOUT FUTURE ENROLMENT AT THE UNIVERSITY OF B.C. WAS PRECIPITATED IN SENATE RECENTLY BY REPORTS FROM THE OFFICE OF ACADEMIC PLANNING AND A SENATE COMMITTEE ON ACADEMIC BUILDING NEEDS. THESE REPORTS ARE SUMMARIZED IN THE COLUMN AT FAR LEFT BY UBC'S DIRECTOR OF INFORMATION SERVICES, T.A. MYERS. THE REMAINING ARTICLES ON THESE TWO PAGES PRESENT A VARIETY OF OPINIONS BY FACULTY MEMBERS AND STUDENT PRESIDENT DAVID ZIRNHILT ABOUT THE NUMBERS CRISIS AND WHAT UBC OUGHT TO DO TO MEET IT.

Faculty-Student Ratio Cut Asked

At the UBC Senate meeting of October 30, Senator Gideon Rosenbluth, of the department of economics, pointed out the omission of the question of the faculty-student ratio in the report on academic building needs.

Dr. Rosenbluth said during the debate that he was surprised that the report of the committee on academic building needs seemed to be based only on a forecast of increased enrolment. He said the committee should also have taken into account the problem of the student-staff ratio.

In the faculty of arts, he said, "this ratio has reached disastrous proportions."

He added: "If we are going to get back to where any reasonable sort of educational process can take place, this ratio must be lowered."

Prof. Rosenbluth went on to say that unless this student-staff ratio could be improved in the faculty of arts and other overburdened faculties, the University should be considering the construction of numbers of 500-seat classrooms.

But, he warned, if this were attempted, "the University would explode under further student alienation." He drew attention to the need for additional office space and more flexible accommodation.

Turning to the subject of study space for students, Dr. Rosenbluth said UBC's present proportion of study space is approximately one-half what is recommended.

He said that in future planning the University must make provision for a much larger proportion of study space, not simply concentrated in the Library, but scattered over the campus for the convenience of students, many of whom now waste much of their potential study time between classes because of the distance between Library and classroom.



Two Possibilities - Loans and Lotteries

Dr. David Bond, of UBC's economics department, offers some unusual suggestions for solving the money and the numbers crisis.

Certain truths are self evident. First, the University is in dire need of funds. More importantly, the funds are needed now if we hope to be able to cope with the influx of students in the next three to five years. (It takes three years from the start to the completion of new buildings). Second, the vast majority of students at UBC come from middle and upper income backgrounds, yet the provincial and federal funds supporting universities come from all classes, including the lower income groups. Thus, grants to universities from governments are, in part, income transfers from the lower income groups to the middle and upper income groups. Third, a vast body of evidence exists which shows beyond reasonable doubt that each year of post-secondary education adds substantially to the expected life-time earnings of the student. The estimates range from \$200 to \$750 for each undergraduate year for the 40 years after graduation.

Given these facts we can then consider two alternative means of obtaining the necessary funds for the University.

1. Raise the tuition by \$1000 per student.

Such a scheme would yield the University more than \$20 million in additional revenue per year, assuming of course that government grants hold constant. The problem is that such an increase in fees might exclude a substantial number of students because of lack of finance. An easy solution would be the following: the provincial government would lend to any student who so desired the full amount of tuition, plus, say, \$1000 for living expenses. The loan would be repaid upon graduation in one of two optional ways; either by a lump sum payment or by a surcharge of say 1% on the borrower's payable tax for the lifetime of the borrower. Such a scheme avoids several of the pitfalls of present loan schemes and has one primary advantage: the cost of educating university students is to a large extent born by the direct beneficiaries of the education, i.e., the students.

The loan is, in effect, a tax spread out over a long period of time. More importantly, the existence of the debt would not be a dead weight on the student. For example, a female student would not regard it as a negative dowry since if she was simply a housewife with zero income she would pay no tax. More



The Paradox in the Student Position

David Zirnhelt, president of the Alma Mater Society, raises a number of important questions concerning limitation of student enrolment. His statement is adapted from a speech made to a student rally on November 1.

There are a number of points that students should be concerned about in discussing the whole question of limiting enrolment. The first is that we have, as a student council and as a student body, been supporting the principal of universal accessibility to university. A policy of limited enrolment, if adopted by the student body, would directly contravene this accessibility policy, which we have supported for at least four years.

I think too we run the risk of appearing to be selfish. In adopting a policy of limited enrolment we would leave ourselves open to a great deal of criticism from the general public, and we should be conscious of the need for a public relations campaign in conjunction with direct political action.

We are going to have to organize and be prepared to go out during the next provincial election and knock on doors to inform the electorate of the desirability of a policy of universal accessibility to universities and regional colleges.

I would propose that we use last year's budget margin—some \$14,000—to promote higher education by a variety of methods. This would mean the preparation of briefs, staging student marches, and hiring buses to send students into constituencies to do some direct political campaigning. We should support candidates—both Social Credit and otherwise—who at least promise a more favourable policy toward higher education. It may be necessary for us to concentrate our campaign in one or two key constituencies where it would be possible to symbolically defeat the government's education policy by defeating their candidate.

Another approach might be to plan a campaign in nine or ten marginal ridings and concentrate our efforts there by sending teams of students to raise the issue of education in a door-to-door campaign.

We must be prepared to spend money and expend energy to make the whole question of overcrowding in our universities a major issue in the next election. And we've got to start planning now.

Please turn to page seven
See BOND

UBC
REPORTS

Vol. 14, No. 8 November, 1968
Authorized as second class mail
by Post Office Department, Ottawa,
and for payment of postage in
cash. Postage paid at Vancouver,
B.C. Published by the University of British Columbia
and distributed free. Letters are welcome and
should be addressed to the Information Office, UBC,
Vancouver 8, B.C.

COMMON SENSE THOUGHTS ON THE STUDENT MANIFESTO

By PROFESSOR E.G. PULLEYBLANK

THE University is currently involved in a storm of rhetoric, including the rhetorical denunciation of rhetoric and the violent denunciation of violence. Amid all the rhetoric attacking the present "unhealth" of the University and the demands for reform, two major issues tend to be obscured.

It becomes difficult, firstly, to discern the real purport of the student demands and, secondly, the common ground between their ideas and the essential principles which faculty members must uphold to remain true to their calling.

Only if both sides can agree on some such common ground will there be a possibility of useful dialogue. Unfortunately, there has so far been little public utterance from members of the faculty and little attempt to find, from our side, this common ground. If there is not more public debate, and soon, we are in danger of being forced to react from moment to moment in a spirit of tactical expediency and may find ourselves either defending positions that cannot or need not be defended, or yielding to pressure in ways that will later be regretted.

If we look at the demands rather than the rhetoric we find that they are in the first place for participation by the students in the decision-making processes of the university. This is claimed as a democratic right, "the political rights of free human beings to have a say in decisions that affect them." This is an appeal which has a sympathetic ring for many faculty members who likewise find that they have less say than they feel they should in decision-making processes.

The structure of the university with its non-academic Board of Governors appointed from outside, its only partly representative Senate, its appointed president, deans and heads with wide and indefinite prerogatives, is hierarchical and authoritarian, however much this may be tempered in practice by established procedures of consultation from above and recommendations from below. Though one must concede the ultimate right of the community at large, which provides the money and which the university is designed to serve, to examine and criticize the way in which the university carries out its functions in society, the independence of universities from direct outside control is a cherished and traditional privilege which is a necessary condition for what is meant by "academic freedom."

WITHIN the university also, individual scholars claim not only their rights of autonomy and freedom in what they teach but also their right to a proper voice in their own governance. By comparison with an ancient self-governing university like Oxford or Cambridge, where rights and privileges are well established, not only by precedent and custom but also by very clear formal procedures, the situation here often strikes one as incoherent and immature. On the other hand it must be admitted that many faculty members seem quite content or at least not so dissatisfied as to wish to spend time and effort advocating reform.

The rights being claimed by the students, in contrast to those traditionally claimed by full faculty members of Western universities, are something new.

An appeal to tradition will evidently be less effective in supporting student voting rights than in

supporting faculty rights and indeed the students are not appealing on such grounds. They are appealing either on the general ground that in a free society they have the right to be treated as responsible adults or, in the case of the extreme activists, in the name of revolution, in the name of the new era which they say is dawning.

This latter appeal is in the name of democracy but it is not our traditional notion of liberal democracy, with rights and privileges laid down and protected by law, but a new form of "participatory democracy" in which, after existing, corrupt, institutional forms have been swept away, an almost mystical communion will be established and the General Will will prevail. The discrediting of bolshevism (and, it would appear, echoes of Maoism) have led to the re-emergence of millenary anarchism as the most radical available doctrine for the extreme left at the present day. For students influenced by these notions, the reform of the university is not the goal, but rather its capture as a citadel from which to revolutionize society at large.

To achieve this end it would clearly not be enough to have a degree of student representation brought into the existing structure. The students under their revolutionary leaders, would have to take actual control, presumably through some type of soviets. Experience of such "participatory democracy" from other parts of the world suggests that its tendency is in the end totalitarian and anti-democratic in the traditional liberal sense.

It is perfectly possible, however, to reject such extreme anarchistic ideas and still to admit that students can be treated as responsible persons with a right to be listened to on matters that concern them. Without accepting the anarchist proposal completely or abandoning traditional principles of what a university is all about, there are certainly concessions that can and ought to be made to student demands for a greater say in various aspects of university government.

AS already suggested, a demand for democratic voting powers in the university as a right on anything like a basis of equality with the faculty seems to be on extremely shaky grounds. Apart from immaturity in years (which may be a less strong argument than formerly if political voting rights can be extended to 18-year-olds), immaturity in scholarship seems to be as strong an argument as it ever was for declining to give those who are only at the beginning of the road power to participate in decisions in academic matters. The demand, for example, to share in making decisions on "the relationship between teaching and research in the university" is a presumption that touches right at the heart of the faculty's academic freedom and could not be admitted for a moment by scholars with a regard for the integrity of their calling.

Nevertheless there are undoubtedly areas in which consultation with students is not only justifiable in terms of democratic "rights" but may also be mutually advantageous to both faculty and students in furthering their common ends. Consultation, that is, direct contacts on specific issues with the affected students or their representative bodies, seems to me to be on the whole a more effective and democratic way of dealing with this kind of problem than the inclusion of student members on faculty committees. At the same time, the presence of some student representatives on the Senate and other governing bodies, such as those concerned with discipline and housing, may also serve a useful watchdog function to see that specifically student interests do not get over-looked.

A demand by students for democratic voting powers in the university as a right on anything like a basis of equality with the faculty seems to be on extremely shaky grounds.

More important than the issue of student participation in university government seems to be an understanding between students and faculty about their essential aims.

More important, ultimately, than the issue of student participation in university government seems to be, however, the achievement of a basis of understanding between faculty and students about their essential aims. If an understanding could be reached on these, the issue of "student power" would cease to be very important for the majority, for solutions to common problems could be sought in a rational, rather than a coercive, way. Let us look at the demands for reform of the educational system that are made as the object of demands for participation in university government.

After a generalized attack on the university for its alleged subservience to the requirements of government and industry and failure to take the lead in creating a "new society" (which appears to be mainly a spillover from student criticisms of the role of American universities in defence research and the like—at least its application to UBC is not spelled out), the student demands from an educational point of view seem to fall under the following headings: (a) freedom in the choice of what is to be studied and how it should be studied, (b) abolition of grades and, in particular, of written examinations as a means of grading, (c) better teaching (no more dry lectures).

The first two items, and even to some extent the last (though that is a more perennial problem), seem to be related to one another and to come from the same source, namely the tremendous expansion of universities in recent years, both in numbers of students and in diversity of subjects taught, a quantitative growth which is turning into a qualitative change so that the traditional role of the university in society is having to be radically reassessed. The university, especially the arts faculty, has to some extent lost its sense of direction. It is in fact quite significant that most of the student unrest is in the arts faculty and not in the professional schools. As the AMS manifesto puts it, "Professional schools and training must exist and they must have some means of regulating their standards." In other words a man who wishes to become a doctor or lawyer must go through the regime that is laid down for him, endure the teaching, good or bad, that is provided by his seniors and submit himself to the ordeal of examination to prove that he has earned his qualification. The applicability of this model to the arts student is, however, denied.

It was not always so. In the mediaeval university the professional goal of a student of the arts was as clear as that of the goldsmith or the doctor. At the renaissance new subjects, especially Greek, were introduced. Much later, in the 19th century, other subjects such as the natural sciences, history and vernacular literatures, which had hitherto been subjects for private study or the business of the academies, made their way into the universities. The old unity in the basic education for any kind of scholar was gone.

At the same time the nature and purposes of the students had also changed. With the coming of the 19th century and the adoption of the principle of competitive examinations for the higher civil service, the universities took on a more serious role of educating the governing class.

This diversion of the universities from their original role of providing professional training for scholars to that of educating gentlemen did not in itself entail any change in the nature of the curriculum provided, which was still laid down by the scholars in the light of their view of the requirements of scholarship. It was assumed that the same curriculum was also the best education for gentlemen. So the British Empire was governed by men who

Professor E.G. Pulleyblank is head of UBC's department of Asian studies and formerly held the chair of Chinese at Cambridge University in England.

could recite Latin and Greek but who had little training in any more practical matters. The principle was much the same as the Chinese system of classical education (on which, indeed, the first British competitive examinations were at least partly modeled).

What has happened in the present century, at least in North America, is a democratization of the whole system, so that instead of educating a small elite, the universities are expected to provide higher education for up to half the citizenry. The appropriateness of trying to do this colossal task by imposing the same disciplines and standards that are necessarily employed in the training of professional scholars is not obvious. The danger is that in trying to do the two separate tasks in the same place and through the same classes, we shall do neither of them well.

FROM the point of view of scholarship there has already been a considerable dilution of standards that has to be made up, if at all, at graduate school. Yet the malaise of the average undergraduate in arts grows more acute all the time. Having neither the ability nor the interest to pursue scholarship as a vocation, he finds his courses "irrelevant" (since, however coherently they may fit into the training of an economist, or psychologist, or literary historian, or linguist, they lose their message in isolation). The rigour and coherence of an Honours program is beyond him so he must fill up his program with a "major", and odd subjects that as often as not are determined by the exigencies of the timetable as much as by strong interest. He finds his time distracted between conflicting demands of unrelated subjects, quizzes, half-term tests, essays, and, always looming ahead, final exams. Classes are usually large, direct personal contact with a professor rare. Small wonder that the flame of intellectual curiosity is hard to keep alive and the whole process begins to seem an exercise in futility.

How do you educate citizens and at the same time not give up on scholarship—for scholarship must continue to be the life blood of the universities or they will cease to be worthy of the name? One solution would be to separate the two functions completely—have a system of small liberal arts colleges which would not aim at providing training leading to graduate studies. Then let the universities impose rigorous entrance requirements, cut down their numbers, and concentrate on honours programs frankly designed to train scholars.

This solution has its attractions but is probably not practicable in British Columbia or in North America generally. The provision of enough small units with adequate facilities and staff would be very expensive and unless they had such facilities and staff, the colleges would lack the prestige to compete with the universities which would soon be under renewed pressure to relax their standards of admission.

Assuming, therefore, that UBC must go on performing the dual role of providing general education and training scholars, what measures can be taken to enable it to satisfy both needs as far as possible? Here are a few random thoughts.

(1) The rationale of educating citizens in the company of apprentice scholars must have more to do with the educative value of an introduction to the methods and aims of scholarship than to the directly useful knowledge that may be picked up on the way. Courses designed to provide factual background knowledge for further study may not be as valuable therefore for the non-specialist as courses that give concentrated attention to particular problems, treated in such a way as to develop critical thinking and to show the importance of delving for factual knowledge in order to solve problems.

The student finds his time distracted between conflicting demands of unrelated subjects, quizzes, half-term tests, essays, and always looming ahead, final examinations.



The conception of a 'well-rounded' education is a relic of the time when the university curriculum covered a limited range of subjects accepted as being of prime importance.



(2) The conception of a "well-rounded" general education is a relic of the time when the university curriculum covered a limited range of subjects that were universally accepted as being of prime importance. It is impossible now, as a result of the proliferation of knowledge in all directions, to be "well-rounded" in that sense and it would seem to be more important to cultivate more generalized capacities—curiosity, open-mindedness, critical thinking, the habit of finding things out for oneself and the knowledge of how to go about it—than to insist on the acquisition of specific accomplishments. This is, perhaps, another way of putting my first point. It seems to imply that *for those not intending a scholarly career* one might reduce general faculty requirements to a minimum, in other words, let people follow their interests and (with help and advice) make up their own programs for a general BA degree.

(3) If one is to encourage curiosity and critical faculties, it seems important to allow students opportunities to go into problems in adequate depth—without being distracted by many unrelated demands on their time. The present system of requiring five courses to be taken simultaneously is bad from this point of view. One of the great advantages of the Arts I program is just the fact that three-fifths of the student's time is taken up by one coordinated program.

(4) One might consider the possibility of a three-year general BA degree from grade XII. This should immediately reduce the pressure of numbers. One could have a first exploratory year, followed by two years, in each of which a coordinated program centred around one topic or one discipline would be followed. One could either make the third year a continuation of the second or do something quite different. (Compare the Cambridge honours degree made up either of Part I and Part II in the same subject, or of two Part I's in different subjects).

(5) Any attempt at separating two streams, one regarded as terminal, the other leading on to further studies, is likely to be undermined by demands of those who have done the terminal program to be allowed to switch to the other. One must be prepared to insist that if this is done, all the necessary extra time is put in by the student to make up for what he has missed. An even more serious undermining, unfortunately, is likely to come from the greater prestige that will inevitably be attached to the stiffer and longer program. Students who would be better advised to take a general degree will try for honours. They will then complain of the rigours imposed on them and there will be a renewed danger of dilution. One can only be on one's guard. There is no perfect, permanent solution.

(6) One of the main objects of student attack has been examinations and grades. Here again the difficulty really arises because of the dual function of university education. In so far as students are seeking professional competence the need to obtain some kind of certification before one is accepted as a professional is self-evident. One may argue about what the standard should be and what is the best means to ascertain whether it has been reached but the need for a standard is easily accepted.

FOR those who are not seeking to join specific professions measurement of the results of the educative process undergone at the university is much more difficult, since there is no more or less self-defining standard of particular competencies that can be applied. Its relevance to the aim of education is also less apparent. One might argue that such people do not need degrees and should therefore not work for them and not be given them. They should come, take what they can from what is offered, and go away with whatever inner satisfaction they may receive as their only reward.

(7) I suspect, however, that such a solution is totally unrealistic. However much they may feel they are inspired by a pure love of learning, students also require the prospect of some tangible reward for their efforts. At very least they want their teachers to say "well done" and to give them some mark of recognition which they can display to the world. To say "well done" and give a mark of recognition, however, must imply, if it is to mean anything, that it had to be earned, that it could have been withheld, that some, in fact, do *not* receive it. The one who gives the recognition must make a judgment and must be allowed the means to do so. This can be one of the most unpleasant things about being a teacher. There is a contradiction between the roles of helping mentor and judge which cannot be avoided.

(8) One can still discuss the best means to examine. No method is or can be perfect. It all comes down in one way or another to one imperfect human being judging another imperfect human being. Written examinations, now so much decried, originated in China as a means of achieving greater objectivity, avoiding favouritism and the influence of family background and good connections. They were the poor man's charter and, even if this did not always work out as intended, it helped to create a society which was much less dominated by hereditary privilege than any European society before modern times.

NEVITABLY there were charges (well justified) that they did not measure what was really significant in attainment, still less in potentiality, that they placed excessive emphasis on rote memorization and harmed genuine scholarship, that the ordeals to which they subjected the candidates were excessive, and so on. Yet the system excited the admiration of early western observers and was the inspiration for the introduction of competitive examinations for entrance to the Civil Service in 19th century England, replacing patronage and nepotism. The suggestion that written examinations should now be abandoned altogether and one should return to a dependence on personal recommendation seems to be singularly ill-conceived.

There are, of course, alternatives to the written final examination as the sole test of achievements and these are in fact already widely employed. Essays, term papers, and so forth, often provide as good a means of grading as formal examinations. They may however actually be more exacting on both students and teachers.

(9) In so far as the complaints of the students are directed against the procedure whereby one accumulates "credits" towards a degree by taking a series of courses, each of which has its own grade given by the instructor, I have much sympathy with them. The European system of comprehensive final examinations is sounder from several points of view. It aims at measuring the overall attainment of the student preparatory to giving him recognition in the form of a degree. Meanwhile (ideally and to some degree in practice) it leaves the student free to prepare himself in his own way without the constant pressure of immediate rewards and punishments, to devote himself to learning a subject rather than merely a series of prescribed syllabi. On the other hand, since everything depends on one set of final examinations the pressure on the student is in the end probably greater in that system than in the North American one.

(10) What must at all cost be resisted is the idea that teachers are under some kind of obligation to give students grades or any other form of certification without being provided with the appropriate means for determining attainment. Otherwise they are being asked to be parties to a form of intellectual dishonesty that is incompatible with the vocation of a scholar.

What must be resisted is the idea that teachers are obligated to give students grades without being provided with the appropriate means for determining attainment.



THE SHRINKING WORK WEEK HAS PRODUCED A POPULATION READY AND EAGER TO MAKE USE OF LIMITED RECREATION SPACE. UBC'S SCHOOL OF PLANNING HAS NEGOTIATED AN \$85,000 GRANT FROM A CANADIAN FOUNDATION TO FIND OUT HOW MUCH USE THE GREAT OUTDOORS CAN SUSTAIN.

How much human use can an acre of woodland support before its ground cover is destroyed forever? How many tents can a strip of beach support before its potential for bathing is gone? How many parked cars can a campsite sustain before the surrounding trees and vegetation are affected beyond repair?

Trivial questions, you say.

Not so, says Dr. Peter Oberlander, the outspoken director of the University of B.C.'s school of planning, who has just negotiated an \$85,000 grant from a Canadian Foundation to try to find the answers to these and other questions.

The two-year project which UBC's planning school will embark on will relate the increasing pressures for outdoor recreation placed on a rapidly-urbanizing area and the natural environment's capacity to sustain intensive human use.

Dr. Oberlander points out that in the past "leisure" was the privilege of the few and was measured as the residual part of the individual's total time budget.

"In other words," he says, "work came first and what was left over was free time."

In an analogous way, he goes on to point out, society in the past allocated space for "important" functions, such as factories, schools, houses, offices and transportation routes, and what was left over was regarded as residual outdoor space.

The framework of contemporary society has changed all that, says Dr. Oberlander. The shrinking work day and work week, early retirement and a longer life have all combined to enable man to devote less time to making a living while maintaining or increasing personal income.

Add to this a rising population equipped and eager

to make use of a very limited and unique commodity and the dilemma becomes obvious.

"More and more people," says Dr. Oberlander, "also care very deeply about the scarcity of outdoor recreational space and its allocation on a regional basis. A good current example is the Roberts Bank-Boundary Bay controversy where there is a conflict between industrial utilization and recreational facilities."

The grant which the UBC planning school has received from the Toronto-based Donner Canadian Foundation will enable a research team to try to discover criteria for space standards for outdoor recreation. The results would be used to decide how much and what kind of outdoor space ought to be set aside in perpetuity for more and increasingly

PLANNING FOR LEISURE



intensive recreational use for summer cottage, skiing and camping developments, to name only a few.

The project will attempt to test its observations and criteria for space standards in the context of recreation opportunities in the Gulf and San Juan Islands. This resource, says Dr. Oberlander, will serve as an outdoor laboratory for the test phase of the Donner project and UBC will have the active cooperation of the department of urban planning at the University of Washington in the study.

The two schools have agreed to an even longer-range joint program of teaching and research within the context of the common coastal region stretching from the Seattle-Tacoma area to B.C.'s Sunshine Coast. Each planning school will contribute \$15,000 in support over the next two years from the Richard King Mellon Charitable Trusts for this latter project.

The UBC project supported by the Donner grant is one brick, as it were, in the structure of the recently-established resource sciences research group in the faculty of graduate studies, headed by Dean Ian McTaggart-Cowan. The multi-disciplinary group was established earlier this year as a result of a \$500,000 Ford Foundation grant and includes the disciplines of forestry, zoology, ecology, agriculture, economics and planning. In the broadest sense, the resource sciences research group directed by Prof. Crawford S. Holling aims to study the impact of man on his physical environment.



MYERS *Continued from page two*

Last year almost one out of five (19.3 per cent) of Canadians in the 18-to-21-year-old group were enrolled in a university or college. But this percentage is moving sharply upward.

British Columbia for years has led the other provinces in the proportion of its young people who enter post-secondary institutions.

In 1962-63 the figure for B.C. was 17.9 per cent; by last year it had risen to 24.2 per cent, and by 1973-74 it is expected to be about 30 per cent.

Thus B.C.'s higher educational institutions are caught in a double bind: much larger absolute numbers of students graduating from high school, and each year a larger percentage of them seeking entrance to universities and colleges.

And for UBC the pressure is particularly severe because each year's crop of high-school grads seems to show an increased preference for UBC. (Of the total pool of potential first-year students, 31.62 per cent came to UBC this year. By 1973-74, according to the forecasts, this figure will rise to 35 per cent).

The baby boom, of course, began to subside in the late 1950's and the drop in the birth rate has been sharply accelerated by the Pill. Still, it will probably be 10 years before this change is reflected in university enrolments.

In the meantime, UBC and other post-secondary institutions must somehow prepare themselves to cope with vastly increased numbers of students.

Some of the implications for UBC of this numbers crisis were spelled out for the Senate Oct. 30 by a new Senate Committee on Academic Building Needs, headed by Dr. D.T. Kenny, head of the department

of psychology.

"The prospect of a university of approximately 34,000 students by 1973-74 poses some monstrous questions," the Kenny committee's report said.

"There will be obvious implications for academic standards. There is the possibility of a major shift in the present balance of graduate and undergraduate activities. It may be inevitable that the academic excellence of the University as a whole will be gradually lowered because of the demands for a rapid increase in space, because of the demands for a rapid increase in faculty, research equipment and library collections.

"Such a growth capacity may be beyond the capability of the University."

The committee said it is clear that at least \$108 million will be needed for new buildings in the next five years.

And the committee noted that even that huge budget was based on an enrolment forecast of only 25,779 students for 1974-75—nearly 10,000 short of the new forecast for 1973-74.

The committee also pointed out that four major buildings, with an estimated construction cost of \$19 million, have been squeezed off the current 1964-69 building program because of lack of funds.

These are a three-wing addition to the Biological Sciences Building, an Engineering common block and new buildings for the departments of Mechanical and Civil Engineering.

If building continues at its present pace, the committee said, the space situation five years hence will be desperate.

But the committee concentrated its attention primarily on the immediate crisis—the 25-per-cent increase in enrolment expected in the next two years.

To accommodate those extra 5,000 students, the

committee said, the University must begin immediately to plan four other major buildings: an addition to the Buchanan Building for the Faculty of Arts; a multi-purpose Science Building; a major library addition for the use of undergraduates; and a new building for the Faculty of Law.

The committee made no attempt at this stage to set construction priorities for these four buildings, nor to mesh them into an overall priority scale which would include the four buildings left off the 1964-69 building program.

Dr. Kenny told Senate his committee felt its first task was to call attention to the numbers crisis, and to offer proposals for meeting the crunch of 1970-71.

But he said his committee will soon come to grips with the difficult problem of establishing priorities, and in its next round of meetings will discuss the problem with the deans of all the faculties.

In the meantime, the Senate referred the Kenny committee's report, and the discussion on it, to President Hare and the Board of Governors, "for serious consideration and action."

The Board of Governors almost immediately awarded a contract for construction of one new wing to the Biological Sciences building, and authorized President Hare to establish clients' committees as the first step in planning the buildings recommended in the Kenny committee's report.

The numbers crisis and means of coping with it will be a major preoccupation for the entire University community for some time to come. As a contribution to the discussion, *UBC Reports* presents in this issue a small selection from the wide range of viewpoints represented within the University. Other expressions of opinion will be welcomed by the editor.

COWAN *Continued from page two*

there are no alternative sources of university education in sight. Beyond this, alternative solutions must be found. The addition of another 14,000 students to our Point Grey campus in the next six years is inconceivable.

Six years ago we examined our academic goals and established some important priorities. UBC was to become increasingly selective in its enrolment of lower division undergraduates and was to concentrate on upper division undergraduates, professional studies and its graduate school. We have made a promising start but the metamorphosis from an undergraduate orientation to one focussed upon graduate and professional education is not an easy one.

Unfortunately we have been caught up in the numbers crisis and the desperate shortage of facilities in the middle of this change. Already large sectors of our campus are having difficulty in directing their resources toward acknowledged goals.

This difficulty is manifest in many ways. The gradual exclusion of graduate student offices from the Angus building, the provision in the Buchanan building of only a few small reading rooms to care for the needs of the graduate and honours students, the relatively small proportion of our faculty that participates in the tutoring and guidance of graduate students, and the hopelessly inadequate number of carrels in the library, are only a few of the problems.

Our crisis reaction to the numbers problem as we presently see it is a case in point. The new undergraduate buildings we are now planning envision the addition of some 400 faculty members, but no mention is made of accommodation for graduate students. The faculty, appropriate to a university with our goals, must be eager and competent to participate in scholarship at the most advanced levels as well as in the improvement of undergraduate education. Few academics of this calibre would accept positions at a university that denied them

contact with graduate students or the facilities for pursuit of advanced scholarship.

Simply stated, the adding of 400 new faculty members means the addition of some 800 new graduate students studying with them. Provisions for them must be part of our expansion plans at every step. If such facilities are not available the quality of our recruiting will be interfered with in a way that will set back our academic progress for years ahead.

The plight we are in has not arisen recently or unforseen; it is the accumulation of years of under-financing both in terms of capital and operating funds. But it has reached a point where our preoccupation is coping with numbers in grossly inadequate space, sure only that no matter how bad it is this year the crowding will be worse next year. Under these circumstances, and in the absence of an assured program of support for capital development, it is most difficult to nurture the imagination, vision and determination to plan in a direction of our own designation and to build steadily toward our agreed goals.

BOND *Continued from page three*

important, if a graduate went into the clergy or social work or some worthwhile but low-paying job, the payments on the loan in the form of the surcharge would be equally low. Indeed, the life-time payments by such a person might never pay back the loan. But consider the individual, who through hard work and application, earns an income of, say, \$25,000 per year. His lifetime payments would not only pay back his loan but several others as well.

2. Limit enrolment to 20,000 and select students by lottery.

This is a straight power confrontation with the government. The evidence is not clear that 20,000 or 30,000, or what have you, is the optimum size for a university. The aim is not to freeze enrolment at some specific level because this is best but rather to

force the government to provide more funds for higher education. The plan would call for the Board of Governors to limit enrolment to 20,000. (We would limit it now so as to get the money now to have the buildings in three years.) Then each student currently enrolled, plus all students applying to enter, would be assigned a number; 20,000 numbers would be selected at random, and only these 20,000 would be allowed to enrol. The point should be obvious that if it suddenly became evident that no matter how good the student, his chances of completing his education were less than certain, he and his parents would be rather vocal in their protests to the elected government and the government would respond to such political pressure.

Of course, the policy is not without costs. It means that the less able and the Nobel Prize winners would be in the same boat and it would not be the most efficient use of the university's resources. But it

would bring pressure to bear on the government to supply more money. Naturally some students are opposed to this plan. They argue, quite rationally, that it would be a tragic waste if a third-year medical student was denied readmission by the draw. Objecting students advocate using the lottery only for incoming freshmen and this has merit in that it would reduce the waste involved with excluding successful upper classmen. However, it would reduce to some degree the public pressure on the government and would also mean that, if it came to pass, university education would be the property of an even more restrictive elite than is currently the case.

I personally favor the first approach since it follows in the spirit of income transfers incorporated into our modern-day approach to taxation and government expenditure. Moreover, it might instill in many students a greater sense of responsibility in their approach to education than is at present the case at UBC.

STEWART *Continued from page two*

vertical communication seems to be more difficult than horizontal communication. It seems harder to contact a man one floor above you than it does a colleague in a neighbouring building, let alone a next-door office.

Extending the campus out, which is what we've been doing, leads to compartmentalization, it seems to me. I think it's undesirable, for example, to build what amounts to a ghetto at one end of the campus

for engineers. Eventually this will lead to a neat little compartment containing only engineers, agriculture students and foresters. I think we will lose something when the engineers are no longer in the middle of the campus, and I think they'll lose something too. In the final analysis I can't see anything to prevent this from happening.

Clearly it's a matter of personal opinion where you stop enrolment. Fifteen years ago I would have said something like 12,000 students was an optimum number. I can remember myself making statements

about the "great universities of the world" having 6,000 to 12,000 students, and at that time I didn't have any reasons for coming to a different conclusion.

Since then I think I've become more aware of the advantages of size and I don't feel as distressed by our present 20,000 as my attitude of ten years ago would have led me to believe I would be. But it seems quite clear to me, in talking to students and faculty, that there is a feeling that we're pretty close to some sort of limit which, if exceeded, will have unpleasant psychological effects.

CONTACT

A UBC ALUMNI ASSOCIATION REPORT



Critical acclaim has come to Edgar Spratt (left) and Garnet Carefoot (seated) for their book, *Famine on the Wind*. David Margerison photo.

NEW BOOK ASKS

Famine on the Wind?

Doomsday is a mere 58 years away. That's the prediction being made these days—and not by some religious nut either. It's being made by responsible, albeit gloomy, demographers, according to UBC alumni Garnet Carefoot, B.Ed. '46, and Edgar Spratt, B.S.F. '42, in their fascinating book, *Famine on the Wind*. "Every second the world over," the authors write, "births exceed deaths by more than two." Starting from the time of Christ, the first doubling of the world's population took 1,650 years; the fourth is expected to occur in less than 40 years.

DOOMSDAY FORECAST

"Because of this ever-shortening period," they write, "the most pessimistic demographers predict that the 'saturation point' will come in little more than 60 years unless the food supply, natural or artificial or both, runs out first. Thus they forecast doomsday: the year 2026."

Famine on the Wind, however, is not specifically about the population crisis, though it is most relevant to that serious problem. The book shows how man and history have been—and still are—affected by plant diseases. And if you think that makes for pretty unexciting reading, you're wrong. Carefoot, who teaches at Richmond secondary school, and Spratt, a retired teacher, have written the book in a wonderfully informal style. It's a book you won't want to put down.

Which is undoubtedly the reason why *Famine on the Wind* has been steadily gaining a following—and considerable critical acclaim—during the year it has been out. The American Association for the Advancement of

Science named it one of the top 50 science books in 1967. Library Journal did the same. The director-general of the UN Food and Agricultural Organization has praised it. Most gratifying to the authors, however, has been the words of Sir Julian Huxley: "*Famine on the Wind* is an important book."

One thing which makes *Famine on the Wind* so fascinating is that it reveals how important natural phenomena have been in the course of history. Why, for instance, did the Hebrews make that famous Exodus into Egypt? Because, say Carefoot and Spratt, they were faced with famine after wheat rust destroyed their crops. And would the late John F. Kennedy ever have become president of the United States if there had never been a Great Irish Potato famine? His ancestors fled Ireland because of the potato blight. Again, Russia's big chance to take the Dardanelles in the 18th century was snuffed out for a very simple reason: ergot fungus on rye grain. Thousands of Peter the Great's troops, poised at Astrakhan, died within a matter of months from eating rye bread whose flour was polluted with the ergot fungus.

BIRTH CONTROL ESSENTIAL

Famine on the Wind argues that, far from being over, the fight against plant disease has perhaps become more crucial than ever in the face of an exploding world population. But, Carefoot and Spratt argue, it won't be enough: birth control is essential. "If man fails to apply voluntary methods to halt the current increase," they write, "he will run into that barrier he has so far been able to avoid: universal famine." By Clive Cocking.

VIEWPOINT

BY A.V. BENTUM

What this campus needs, and not this campus only, is students who are willing to do a little changing of themselves. The reference is in terms of growth. It often seems to me that the children of today are born grown-up, hence there can't be much room for further growth. They have already "had it"—old before their time. Many of the educators can't wait to get children into school, almost robbing the cradle. Why all the frenzy to educate minds, are we really so short of time? The only meritorious thing I see in Dr. David Suzuki's advocacy of pubs on the campus is that they may encourage a little time-wasting, if it can ever be "wasted".

BEER NEVER A WAY OF LIFE

The picture I got as I read his plea for a campus pub, is of a squalling infant whose non-plussed mother sticks a comforter in its mouth. My memory reminds me that some of them used sugar tied in a rag. The University children have plenty of sugar sticks, apparently can also get "pot" and "mind-blowing" agents too. No doubt some minds need "blowing". My peers and I saw plenty of things blown on the two World Wars. We also got old very quickly, but it wasn't just in the head—we learned something about feelings and values.

I've quaffed beer, (arms and legs we called it, since it hadn't any body in it) in a French estaminet, a Mediterranean port, a Legion Hall and an urban beer parlour. Beer was never a need or a way of life, I am just saying that I am not a temperance crank either. From the above experiences I cannot say that I ever learned much that was useful in a pub, or achieved anything worthwhile in the way of communication. One can understand Dr. Suzuki's need for a pub if he is a fairly typical researcher. However, he shouldn't really need "oiling" in order to function in the communication business.

Personally, in my student days I neither had the money nor the leisure to spend in pubs. If they are the measure of learning or culture then some European students ought to be the best in the world. Perhaps that fountain of wisdom, the "Town Fool", could throw some light on the subject. It is understood that he was quite a busy fellow at the recent Faculty Club "occupation".

What Dr. Suzuki seems to deplore is the necessity of beer-drinking students having to go off campus for a beer. Why not a nice little ghetto of one's own? Let's change the children's hymn to "you in your small pub and I in mine". What this campus needs is less dialogue by means of beer in the belly and more dialogue with the empty bellies of the world society. Some of us have known hunger, thirst, mud, weariness, and pain. Thank God for it! We learned our values and, we hope, developed some character muscles. We haven't needed an excess of hair on the body to convince us of our role. We can leave that to the butlers, footmen, man-servants or the dandies of earlier generations.

COURTESY AND RESPONSIBILITY NEEDED

What this campus needs is a little more courtesy and social responsibility. It needs a little more willingness to gain historical perspective, perhaps even listen to people so glibly labelled conformist. A look in the most convenient mirror would reveal how conformist some of the so-called non-conforming really are. What is needed is a better understanding of the love talked about but not enough practiced. It might be discovered that love is neither soft, nor merely sentiment. There was nothing soft about a soldier's love for his mate, nor for his country. The desire for a pub sounds to me like "self-love", or at least self-indulgence, of which we have already seen too much.

Retired social worker A.V. Bentum has undergraduate degrees from the University of Toronto and McMaster University and took his social work training at UBC. The founder of the Oakalla Narcotics Treatment Centre, he now lives in White Rock.