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Fourteen of UBC's top students, who will receive medals and prizes during Spring Congregation May 28-30 as heads of various graduating classes, put on a happy face for the UBC Reports camera in the campus Centre for Fine Arts. Standing, left to right, are: David W. Nichols, head of the architecture class; Gary K. Hewitt, commerce class leader; Robert J. Epp, a mathematics student and winner of the Governor-General's Gold Medal; Miss E. Jane Termuende, tops in agriculture; Miss Gloria M. MacKenzie, head of the secondary education class; Arthur L. Close, head of the law class; Robert J. Duke, medical class head; John A.G. Fountain, an economics student and head of the arts graduating class; Robert J. Clarke, dentistry class head, and John H. Salmela, who led the class in physical education and recreation. Seated on the bench, left to right, are: Miss Lynda M. Berry, home economics leader; Miss Ingrid P. Buch, music class head; Miss Joyce E.K. Page, tops in nursing, and Mrs. Annette Wigod, one of two persons tied for leadership in the master's degree program in social work. For Congregation details, see page two. Photo by Extension Graphic Arts.



Dr. Arnold (: Smith


Sir Michael W. Perrin


Dr. Alfred W.H. Needler


Professor R.G.N. Norrish

## FOUR GET HONORARY DEGREES

## Record Class Graduates May 28-30

More than 3,700 students will receive their degrees at the University of British Columbia's 1969 Spring Congregation ceremonies May $28-30$ in the campus War Memorial Gymnasium.

Highlights of the three-day ceremony will be the installations of Dr. Walter Gage as UBC's sixth president on May 28 and Mr. Allan M. McGavin as Chancellor of the University on May 30 to succeed Mr. John M. Buchanan.

UBC will also confer honorary degrees on three distinguished scientists and a noted Canadian public servant at Spring Congregation.

On May 28, the honorary degree of doctor of laws will be conferred on Dr. Arnold C. Smith, secretary-general of the Commonwealth Secretariat since 1965 and former Canadian ambassador to Russia and the United Arab Republic. Dr. Smith will also deliver the Congregation address.

On May 29 UBC will honour Sir Michael W. Perrin, the Canadian-born chairman of the Wellcome Foundation Ltd. and a key figure in development of atomic energy in Great Britain. He will receive an honorary doctor of science degree and give the Congregation address.

On May 30 honorary doctor of science degrees will be conferred on Dr. Alfred W.H. Needler, deputy minister of fisheries for Canada, and Professor R.G.W. Norrish, former professor of physical chemistry and director of the department of physical chemistry at Cambridge University, and a joint winner of the Nobel Prize for chemistry in 1967. Dr. Norrish will give the Congregation address.

Dr. Arnold C. Smith, who is currently secretary-general of the Commonwealth Secretariat, is a former Rhodes Scholar for Ontario and has had a distinguished career in the foreign services of both the United Kingdom and Canada.

Before transferring to the Canadian diplomatic service in 1943 he was press attache of the British Legation in Tallinn, Estonia, an attache in the British embassy in Cairo and head of propaganda for the division of the U.K. Ministry of State, Middle East.

He served with the Canadian diplomatic service in Russia during the second World War and then returned to Canada and became an adviser on various committees representing Canada at the United Nations and, subsequently, principal adviser to Canada's permanent delegation to the UN.

He was Canadian minister to the U.K. from 1956 to 1958, Canadian ambassador to the United Arab Republic from 1958 to 1961 and Canada's ambassador to Russia from 1961 to 1963.

Sir Michael Perrin, chairman of the Wellcome Foundation Ltd., was born in Victoria, B.C. Educated in Canada and England, Sir Michael holds degrees in both chemistry and physics. In 1929 he joined Imperial Chemical Industries, one of the world's largest industrial complexes, and played a leading role in the development of polythene. From 1941 to 1951 he was associated with Britain's atomic energy program and had a key role in șcientific liaison between the U.K. and Canada.

The Wellcome Foundation which he chairs distributes funds to support academic medical research.

Dr. Alfred W.H. Needler, Canada's deputy minister of fisheries, is a former director of the federal 2/UBC Reports/May 28, 1969

Biological Station at Nanaimo and one of Canada's most respected fisheries scientists.

For more than 35 years he has studied the fisheries resources of both the Atlantic and Pacific Oceans in such fietds as migration, ecology and the biological study of fisheries statistics. Oyster culture methods in the Maritime provinces are a direct result of his original work.

Dr. Needler has also been associated with a number of international fisheries commissions and with committees organized under the auspices of the UN's Food and Agricultural Organization in Rome.

Prof. Ronald G.W. Norrish held the chair in physical chemistry at Cambridge University for 37 years and was awarded the Nobel Prize with two other chemists in 1967.
In his early work he laid the foundations for the theory of chain reactions and in the 1950's revolutionized the field of photochemistry. The department he headed at Cambridge gained an international reputation as one of the leading centres in the world for research in physical chemistry.

## Posthumous Degrees Awarded

The University of B.C. Senate has approved the awarding of posthumous academic degrees to three outstanding students who died during the past academic year.

All three of the students would have graduated this year and received their degrees at UBC's spring congregation May 28-30.

Posthumous degrees were awarded to:
Elwood A. Peskett, of Naramata B.C., an applied science student in the department of mechanical engineering. He died in December, 1968, at the age of 24.

Paul Donaldson, of Vancouver, a medical student, who died in October, 1968, at the age of 23. Donaldson, who was in his final year of studies leading to the medical degree, was the top student in the first year medical class three years earlier.

Miss Irma Kriese, 31, who died on May 7. Miss Kriese, of Edmonton, had completed all the requirements for the master of arts degree in the department of German.

Following are the heads of the 1969 graduating classes:

The Governor-General's Gold Medal (Head of the Graduating Classes in Arts and Science, B.A. and B.Sc. degrees): Robert James Epp, Vancouver.

The Wilfrid Sadier Memorial Gold Medal (Head of the Graduating Class in Agricultural Sciences, B.Sc., Agr. degree): Miss E. Jane Termuende, West Vancouver.

The Association of Professional Engineers Gold Niedal (Head of the Graduating Class in Engineering, B.A.Sc. degree): Norman Trusler, 100 Mile House.

The Kiwanis Club Gold Medal and Prize, $\$ 100$ (Head of the Graduating Class in Commerce, B.Com. degree): Gary K. Hewitt, Vancouver.

The University Medal for Arts and Science (Head of the Graduating Class in Arts, B.A. degree): John A.G. Fountain, Vancouver.

The Law Society Gold Medal and Prize, Call and Admission Fee (Head of the Graduating Class in Law, LL.B. degree): Arthur L. Close, Vancouver.
The Hamber Gold Medal and Prize, $\$ 250$ (Head of the Graduating Class in Medicine, degree of M.D.): Robert J. Duke, Vancouver.

The Horner Gold Medal for Pharmacy (Head of the Graduating Class in Pharmaceutical Sciences, B.Sc., Pharm. degree): Miss Beverly C. Henderson, New Westminster.

The Helen L. Balfour Prize, $\$ 250$ (Head of the Graduating Class in Nursing, B.S.N. degree): Miss Joyce Ellen Kathleen Page, Richmond.

The Canadian Institute of Forestry Medal (best all-round record in Forestry in all years of course, B.S.F. degree): R. James Pearson, Vancouver

The H.R. MacMillan Prize in Forestry, $\$ 100$ (Head of the Graduating Class in Forestry, B.S.F. degree): David S. Jamieson, Port Alberni,

Dr. Maxwell A. Cameron Medal and Prize, $\$ 100$ (Head of the Graduating Class in Education, B.Ed. degree, Secondary Teaching field): Miss Gloria M. MacKenzie, Vancouver.

Dr. Maxwell A. Cameron Medal and Prize, $\$ 100$ (Head of the Graduating Class in Education, B.Ed degree, Elementary Teaching field): Colin Anthony Farrell, Vancouver

The College of Dental Surgeons of British Columbia Gold Medal (Head of the Graduating Class in Dentistry, D.M.D. degree): Robert John Clarke, Vancouver.

The Royal Architectural Institute of Canada Medal (outstanding student in Architecture, degree of B.Arch.): David Wayne Nichols, Vancouver.

The Ruth Cameron Medal for Librarianship (Head of the Graduating Class in Librarianship, degree of B.L.S.): Anthony Albert Metie, Vancouver.

The Canadian Association for Health, Physical Education and Recreation Medal (Head of the Graduating Class in Physical Education and Recreation, B.P.E. degree): John H. Salmela, Vancouver.
Special University Prize, $\$ 100$ (Head of the Graduating Class in Home Economics, B.H.E. degree): Miss Lynda M. Berry, North Vancouver.

Special University Prizes, $\$ 50$ each (Outstanding in the Graduating Class in Social Work, M.S.W. degree): Mrs. Leslie Bella, Winnipeg and Mrs. Annette Wigod, Vancouver.
Special University Prize, $\$ 100$ (Head of the Graduating Class in Music, B.Mus. degree): Miss Ingrid P. Buch, Vancouver.

Special University Prize, $\$ 100$ (Head of the Graduating Class in Rehabilitation Medicine, degree of B.S.R.): Miss Barbara Vaughan-Parks, Quebec.


IHE long-awaited preliminary report of the UBC Senate's Committee on Long-Range Objectives was delivered to the Senate at its meeting May 21. The document so far is only an initial draft of the first four chapters of the committee's report The complete and revised report is expected to be ready in the fall and will be offered as a guide to the development of the University over at least the next decade.

In its preliminary report the committee tackles two complex and controversial issues: the question of imitation of enrolment at UBC, and improvement of the academic organization of the University.

The committee was unable to reach unanimity on either of these issues. The majority of the committee recommends limiting UBC's enrolment to 27,500 , but its chairman dissented. On the question of changing the organizational structure of the University, the committee divided $6-5$. The majority favored some modification of the existing structure; the minority proposed dividing the University into a number of federated colleges.
(Much of the text of Chapter Four of the report, dealing with structural change, is reprinted on the next three pages.)

In a brief introductory chapter, the report refers to an earlier document of similar nature, Guideposts to Innovation, published in 1964.

The committee notes the changes in the "intangible environment" on campus over the last five years, and how they have affected the committee's structure and its operations.

Guideposts was prepared by a committee of seven faculty members and one alumni Senator, appointed by and reporting directly to the President.

The present committee is a creature of the Senate. our of its members were elected by Senate, five vere appointed by the President, three are ex-officio and two were co-opted by the other members.

Two members of the Guideposts committee are members of the Senate Long-Range Objectives Committee. They are Prof. Cyril Belshaw, head of the department of anthropology and sociology, and Prof. John Norris, acting head of the department of history.

Other members are Dr. Robert Clark, director of academic planning; Dr. W.D. Finn, head of the department of civil engineering; Mr. K.M. Lysyk, professor of law; Dr. J.R. McIntosh, professor of education; Mr. D.F. Miller, member of the Board of Governors; student senator Donald Munton; Dr. M.W. Steinberg, professor of English; Dr. R.W. Stewart, professor of oceanography; Mr. D.R. Williams, Alumni representative; and Chancellor John M. Buchanan, President Walter H. Gage and Registrar J.E.A. Parnall, who are ex officio members.

The Belshaw report notes that the Guideposts committee contained no student representation and that its report was pervaded by "the implicit and imperturbable conviction that the faculty knew what is best for students, at least in the broad realm of academic affairs." That assumption, the committee notes, is no longer unchallenged.

N Chapter Two, the committee deals with the question, "What should be the main academic goals at this University?" The three goals it identifies are the preservation and extension of knowledge; the development of the individual student; and serving the needs of people in society.

The report devotes more space to the University's social role than to the other two goals. It says the University should help students prepare for a career that will be useful to them and to society, but without overemphasizing technical training that could well be provided elsewhere.

It notes that some students and faculty members feel the University should become more an instrument for social reform, through political, practical or cultural means.

The committee concludes that the University should not give strong emphasis to the preparation of students for political participation; that the University itself must continue to remain neutral in political controversies; and that faculty members and graduates should become more involved in political affairs but only as individuals and not as spokesmen for the University.

In its concluding comments in this chapter, the committee says: "We recognize that increasing numbers of students are challenging goals and priorities within the University. More and more they are asking moral questions. They are questioning the moral values faculty members bring to the

## First Four Chapters of Long-Range Report Presented to UBC Senate

## Committee Calls for Comments

The Senate Committee on Long-Range Objectives has called for comments on the first four chapters of its preliminary report presented to Senate May 21. Faculty members, students, graduates and other interested members of the University community are asked to make their views known to the chairman, Dr. Cyril Belshaw, by mid-August.

This issue of UBC Reports includes a summary of the first three chapters of the report (this page) and the bulk of Chapter Four dealing with revision of the organization of UBC (see Pages Four, Five and Six).

Only a limited number of copies of the report have been reproduced. Inquiries should be directed to the secretary of Senate, Mr. J.E.A. Parnall, Registrar, General Services (Administration) Building, phone 228-3159.
decision-making process in department, faculty and Senate meetings.
'Very many faculty members do not feel equipped by virtue of their own scholarly training to cope with these questions. Often they would prefer to avoid them.
"We believe that the students are justified in raising these questions and expecting faculty members to discuss them. This is not an argument for importing a discussion of Plato's doctrine of the good, the true and the beautiful into a class on mineralogy or differential equations. But it is an argument for developing the sort of university where students feel free to raise such questions with their professors in informal gatherings, and where at least some faculty in every department are willing to engage in dialogue with the students on these and related topics.'

Chapter Three of the Belshaw committee's report approaches the academically and politically hot issue of restricting enrolment at UBC.

The committee says that the basic question of how many students should be provided for in all the public universities and colleges of B.C. is a political question and that it must be resolved in the political arena.

The decision as to how many students should be admitted to UBC, it says, is a matter for the University's Board of Governors. It adds that it hopes its recommendations will be useful to the Board.

But it says that, because of UBC's special position in the field of higher education in British Columbia, "we cannot responsibly advocate any enrolment policy without taking into consideration the needs of other universities and colleges in the province, and the needs of students who may want to attend our institution or others."

After discussing enrolment trends and some projections into the future, the committee in a majority recommendation calls for the restriction of total undergraduate enrolment on the present campus to a maximum of 22,000 .

The majority also recommends that the annual rate of increase of graduate enrolment be limited to 15 per cent, reaching a maximum of 5,500 in 1974-75. It says these enrolment policies should be reviewed by a Senate committee every five years, and new recommendations made for the succeeding decade.
(In the winter session of 1968-69 UBC had an enrolment of 17,632 undergraduates, including 1,209 enrolled in post-bachelor professional programs, and 2.456 graduate students for a total enrolment at Dec. 1, 1968 of 20,088 . The committee's majority recommendations, if adopted, would impose a ceiling
on total enrolment of 27,500 students, in a ratio of four undergraduates to one graduate. This would mean an addition of 4,368 undergraduate and professional students and 3,044 graduate students).

The committee also recommends that first-year entrance requirements for B.C. students be raised to 65 per cent, the level now required for students from outside the province, beginning with the academic year 1970-71.
(UBC's policy in the recent past has been to admit all applicants with a B.C. Grade XII average of 60 per cent or better. However, on Feb. 26, 1969, Senate adopted a new policy guaranteeing admission to first year only to those students with an average of 65 per cent or better, and stipulating that those with averages ranging from 60 to 65 per cent would be accepted "only if the University has the physical, financial and educational resources to accommodate them.")

Raising first-year entrance requirements for B.C. students to 65 per cent will not be enough, in itself, to restrict enroiment to the limits proposed, the committee said. For long-term effectiveness, enrolment must be limited in both first and second years of the largest faculties-arts, science and education.

The majority of the committee recommended an enrolment-quota system, beginning in the fall of 1970 for a five-year period, covering the first two years in these faculties and in agricultural sciences and physical education and recreation education, and for the first year in commerce and business administration.

The quotas, the majority said, should be equal to enrolment in the programs concerned at Dec. 1. 1969, or the average enrolment for the four years $1966-67$ to $1969-70$. Deans should be free to adjust the proportions of the quota alloted to first and second year within their own faculties.

WHERE the demand for admission to a program exceeds the quota, the report said, limitation should be based on academic ability. The committee opposes quotas based on the student's geographic origin or previous institution.

In his minority submission, Prof. Belshaw agreed with the 65 -per-cent entrance requirement but said the attempt to limit enrolment to 27,500 is arbitrary and unjustified.

In Prof. Belshaw's view, the total enrolment of the University should be based on the number of students that each faculty or college considers it has the capacity to educate. This consideration would take into account appropriate teaching methods and the availability of teaching staff, space, equipment and aides.

The calculations built up in this way would constitute a "student admissions budget" which would be subject to review and negotiation with the University authorities.

In its discussion of enrolment trends, the committee noted that a forecast made by the office of academic planning in April, 1968, predicted that, under existing admission policies, undergraduate enrolment would rise to about 30,000 and graduate enrolment to 4,400 by the fall of 1973 .

This forecast is now being extended to a 10 -year period and revised in light of the effect on UBC enrolment of the development of other universities and colleges.

The committee said that when it publishes the final edition of its report in the fall, it hopes to be able to forecast the University's enrolment, program by program, for the next 10 years.
"What seems highly probable," it said, "is that under existing enrolment policies total enrolment a decade hence will be in excess of 40,000 . Is this in the best interests of students, the faculty and society?"

# COMMITTEE OFFERS CHOICE: FEDERATED C 

(What follows is the bulk of Chapter Four of the preliminary report of the Committee on Long-Range Objectives of the UBC Senate).

At the outset we define what it is we intend to consider in this chapter, and what we are excluding. We are not considering the composition or role of the Board of Governors, or the relation between the role of the Board and that of the Senate. These topics lie outside our terms of reference. We are concerned with criticisms of our existing academic organization at the level of the department or school and the faculty, and the relations between them and the Senate.

There are observable weaknesses in our present academic organization. They are likely to be accentuated as the university continues to grow. What are they?
(i) The Faculties of Arts, Education and Science, and several departments within Arts and Science already have become so large that it is becoming increasingly difficult for them: (a) to provide an environment for students and for faculty that permits direct discourse and association; (b) to maintain internal cohesion and communication; (c) to co-ordinate and staff classes with many sections; (d) to interest faculty members in teaching service courses provided primarily for those who will specialize in other departments.
(ii) It is difficult to establish and develop interdisciplinary programs, partly because so many faculty members conceive of their academic responsibilities almost solely in departmental terms.

How serious are these criticisms, and how far reaching are their implications? In answering these questions the committee is divided. On the central issue the vote was 5 to 6 . The minority of the committee believes that the criticisms are so basic that a fundamental restructuring of the university is essential. The majority believe that it is possible to deal constructively with the criticisms by modifications within the existing system. We shall refer to the main ideas of the minority as the Federated Colleges Proposals. We begin with them, and then give the majority comments upon them with alternative recommendations

## TWO ASSUMPTIONS

The Federated Colleges Proposals are based upon two assumptions: (i) it is desirable that the academic units of which a university is composed and within which faculty and students work and identify, should be relatively small; (ii) the university as a whole should be large, primarily because size, if used effectively and positively, can provide academic opportunities which can not otherwise be created.

The first premise leads directly to challenging the need for the two main units of daily administration in the university-the faculty and the department. Do we really need to have faculties at this university? The enormous diversity in size of the faculties in itself leads to a questioning of the important role of the faculty as an academic unit.

This question becomes all the more pertinent in that deans, but not department heads have direct access to the President to present their budgetary case. Yet there are four departments, namely English, Mathematics, Physics and Chemistry, each of which, as of December 1. 1968, had a larger academic staff than each of six faculties. It would be possible to replace the present twelve faculties by three Academic Divisions operating on this campus. Later a fourth division could be added which might operate on one or more satellite campuses. The Faculty of Graduate Studies would be converted into a Graduate Council. The Senate would prescribe its duties and its structure. Membership in this council would come from academic units concerned with graduate work.

The chief functions of departments would be to supervise appointments of individuals to the various colleges and institutes. Departments would also maintain and allocate centralized facilities, when this was deemed necessary. Departments would also sponsor research and seminars not covered by colleges and institutes. The institutes would be special-purpose organizations, concerned with providing academic services or handling sharply focussed research to advance knowledge with regard to a co-ordinated set of problems.

Each Academic Division would be governed by a Vice-Chancellor and an Academic Council. For each 4/UBC Reports/May 28, 1969
college there would be a Principal in charge of administration and a Faculty Assembly for internal academic government. Especially in the large colleges it would be desirable to have what could be called divisions, rather similar in functions to present departments, though these would not need to be organized along the lines of disciplines.

Each Academic Division would have its own geographic location on campus. The nucleus of Academic Division One would be the present Faculty of Arts. It would occupy primarily that part of the campus to the north of the present Physics, Chemistry and Civil Engineering Buildings. No college on campus would be permitted to exceed 2,500 students. This division would

## TIMETABLE PROPOSED FOR FEDERATED COLLEGES PLAN

Proponents of the federated colleges concept suggest the following as an approximate timetable that could be followed in working toward the implementation of their proposals on this campus. In 1969/70 it would be essential to restrict enrolment for the following year. The guiding principle would be to accept students up to the capacity of the existing facilities and the expected financial resources. At the same time that this was being worked out, the university should be negotiating with the Provincial Government for changes in the Universities Act and the acquisition of land in the University Endowment Lands for a satellite campus.

Study groups would be formed from existing faculties to work out details for the creation of the new Academic Divisions. By 1970/71 the faculties would be considering concrete proposals from the study groups, and would make recommendations concerning these proposals to the Senate and the Board of Governors. By 1971/72 the three Acadernic Divisions on campus would begin their operations and the fourth one could commence on the satellite campus in 1972/73.

In the long run, possibly in two or three decades, the degree-granting powers of Senate could be decentralized to the Academic Councils. These in effect would become the Senates of constituent universities in a federated system.
commence virtually at once, with colleges designated somewhat as follows. The maximum enrolment suggested is indicated.
(i) COLLEGE OF HUMANITIES-based upon English literature, comparative literature and history $-2,500$ students.
(ii) COLLEGE OF CREATIVE ARTS-including music, fine arts, theatre, creative writing and architecture $-2,000$ students.
(iii) COLLEGE OF MODERN LANGUAGES-for specialists in specific non-English languages and literature-2,000 students.
(iv) COLLEGE OF COMPARATIVE LANGUAGE AND LITERATURE-including humanistic and comparative study of linguistics, comparative literature, and comparative studies with particular regional emphasis, such as Asian and Slavonic Studies- 1,500 students.
(v) COLLEGE OF THE SOCIAL SCIENCES-based upon anthropology, sociology, psychology, economics, political science, and a scientific approach to linguistics and history-2,500 students.
(vi) COLLEGE OF PROFESSIONAL SOCIAL SCIENCE-based upon grouping together those disciplines which concern themselves professionally with social, economic and personal organization. This would include the present School of Community and Regional

Planning, the School of Social Work, and programs in such fields as Adult Education and Recreation-500 students.
(vii) COLLEGE OF LIbRARY Studies-200 students.
(viii) COLLEGE OF LAW-700 students.
(ix) COLLEGE OF COMMERCIAL STUDIES-this college conceivably could be allocated to another division- 2,500 students.

At a future date two colleges and two institutes could be added to Division One. These are:
(i) COLLEGE OF APPLIED SOCIAL SCIENCES-to be developed for those who wish to use the social sciences as a basis for professional work, or for its relevance for contemporary problems $-1,000$ students.
(ii) INSTITUTE OF ADVANCED STUDIES IN THE HUMANITIES.
(iii) INSTITUTE OF ADVANCED STUDIES IN THE SOCIAL SCIENCES.

Both of these could be elite institutes grouping special programs in the relevant disciplines of an advanced research and scholarly character. These institutes would be staffed by joint appointments by faculty members on leave from colleges, and by special full-time staff. Probably the present Institute of Asian and Slavonic Studies, of International Studies and of Industrial Relations could be reconstituted and included in these institutes.
(iv) COLLEGE OF INDIVIDUAL STUDIES-this college would consist of a group of tutors and adviags available to direct students engaged in individual apart from organized classes-500 students.

In these proposals Academic Division Two would be located in the area now occupied by Chemistry, Physics, the Biological Sciences, Medicine, Dentistry and Pharmacy. Tentatively there are five colleges and two institutes proposed for this Division. The third Academic Division would occupy the south and south-west part of the campus. Three colleges would be in this division, including Engineering, Agricultural Sciences, Forestry, Secondary and Graduate Education.

## FOURTH DIVISION

A fourth division should be developed, preferably in the present University Endowment Lands area satellite campus. Several colleges that could be included in such a division are indicated.
(i) ORIENTATION COLLEGE IN ARTS AND SCIENCE:-This would be a two-year college designed to introduce students to the scope of the disciplines and their methods. It would help students who were uncertain about their vocational goals when they came to the university. They should be able to choose a particular discipline more in accordance with their needs after a year or two in this college $-1,500$ students.
(ii) COLLEGE OF GENERAL STUDIES-This would be a four-year experimental college for students who prefer a general degree to one obtained by concentrating upon any one discipline. It could be an extension of the present first year Arts I experimental course to cover four years $-1,500$ students.
(iii) COLLEGE OF ARTS--Such a college might be established to reduce enrolment pressures on colleges in Division One-2,000 students.
(iv) COLLEGE OF SCIENCE-A similar purpose could be served by this college in relation to Division Two - 2,000 students.
(v) COLLEGE OF ADULT AND CONTINUING EDUCATION-This college, unlike the present Department of Continuing Education, would have its own faculty members.
(vi) COLLEGE OF ELEMENTARY EDUCATION-2,500 students.
(vii) COLLEGE OF INTERDISCIPLINARY hUMANITIES AND SOCIAL SCIENCES

Some of the colleges would be partly residential. This could be achieved by designating certain residences as being attached to particular colleges. The colleges then would have control over the residences, but in principle a certain proportion-perhaps 20 percent-of places in the residences would be reserved for students not attending the college for their main work. As buildings attached to colleges increased, space for tutorials, classes and offices could be arranged in or close to residences

## JLLEGES OR CHANGES IN PRESENT SYSTEM

where this was practicable. Such measures would reduce the present high degree of separation of the academic program and life in the residences.

## SPACE ALLOCATION

The allocation of space under these proposals to individual colleges and institutes would be handled differently for various types of organization within Academic Divisions. In some instances existing buildings could be divided in such a way that some colleges could have physical locations in a defined area. Other colleges would be primarily academic administrative units making use of general university facilities. Where expensive laboratory facilities were involved, control might be vested in one college, which might lease space to other colleges

How would the Senate be affected by these proposals? What would be the relations between the Senate and the Academic Divisions? Advocates of the

Such changes would, of course, require a new University Act as far as this university is concerned. Other universities in the province would not need to be governed by the same Act, and could have legislation appropriate to their needs.

Advocates of the federated colleges concepts believe that the main features of an act for the University of British Columbia should incorporate three points: (i) recognize the legal existence of the university; (ii) define the composition and authority of the Board of Governors; and (iii) recognize the existence and authority of Senate, whose composition and authority would be decided by the existing Senate and modified by subsequent Senates.

An approximate four-year timetable for the discussion, modification and implementation of the federated colleges proposals is provided in Appendix I to this chapter. (See box on opposite page.)

The advocates of the proposals described above believe that the following are the chief advantages they offer:
easier for students to identify with their college and its life.
(v) It would be easier than at present to create new institutes or colleges to co-ordinate interdisciplinary programs.
(vi) Under the present arrangements some departments are reluctant to handle service courses, especially for students who are unlikely to do most of their subsequent work in the department concerned. Also some departments have little incentive to hire staff with a particular interest in interdisciplinary functions, especially if such individuals wish to devote most of their time to work not directly related to the main fields of concentration in the department. Each college, having its own budget, will be able to call on the department to help it recruit faculty members to meet its needs. All faculty members of a college or institute will also be members of a department. Therefore no individual faculty member need feel second-rate or inferior merely because he is alone or has only one or two colleagues in his discipline who are members of the same college. For example, a mathematics professor in the College of Humanities would still regard himself as a full member of the Mathematics Department. He would attend and take part in seminars and colloquia organized by the Mathematics Department.

## VALUABLE IDEAS

This plan contains a number of valuable ideas which can be implemented whether or not the basic proposals for academic reorganization are adopted. For example, such ideas as the creation of a satellite campus, an orientation college, and a college of generat studies, and the proposals to develop a closer link between the academic programs and the life of the colleges could be adopted under the existing administrative organization of the university. We shall return to a consideration of each of these suggestions. There is room for many modifications in the proposals, and the reorganization proposed does not depend for its validity upon the adoption of all the details described above. Thus the precise number of colleges and institutes and their allocation to a particular Academic Division are not of prime importance in the proposals, and these details could be modified substantially. The essence of the proposals lies in a type of further decentralization of administration in the university.

In this some members of the committee see not only constructive answers to the criticisms (of existing structures of departments, schools and faculties described above), but also an open vista to a more sophisticated style of university life that could develop on this campus.

A small minority of the committee believe that there are more effective methods of coping with the criticisms of the existing university organization.... To these members of the committee the following are the chief disadvantages of the federated colleges proposals.
(i) ... the recommended administrative organization is substantially more complicated than the existing system. It introduces another layer of university government, the Academic Divisions, with their Academic Councils and the Vice-Chancellors. In addition, a substantial number of colleges will need to have their own divisions, each with its chairman. The majority are convinced that the proposals would entail considerably more expensive university government, both in terms of dollar costs and in the amount of time spent by faculty members in serving on committees and in writing letters and reports. They also believe the recommended system would tend to be more costly in terms of capital facilities, arising out of the natural desire of each college and institute to control its own space in so far as possible. Evidence already exists on this campus to indicate that space is utilized more efficiently when it is under centralized control.

But more expensive university government, in the sense of higher cost per student, might be justified in the improvements if sense of community and quality of education were sufficiently great. Is it essential to have the more expensive government in order to achieve these worthy goals? The majority believe that a main cause of dissatisfaction on the part of many students is to be
continued from page five
found in their disagreement with many faculty as to the proper priority on objectives for this university Disagreements over curriculum and dissatisfaction with excessively large classes are also major sources of disagreement. We shall make specific recommendations with regard to all of these points later, primarily in Chapter V.

The existence of many classes over 100 students is in part a reflection of our chronic shortage of revenues, as well as the deliberate choice on the part of some departments which prefer to keep instruction costs relatively low in some courses in order to have more money for research and graduate instruction. All of the committee agree that greater freedom to initiate curriculum experiments is desirable. The majority are not convinced that a more complicated and costly form of university government is needed in order to achieve this goal.

Would the federated college proposals be helpful in improving the morale of faculty members? Are there better ways of seeking to achieve this? The answer to the first question is not a simple yes or no. Many faculty members would prefer to be members of a college or institute as well as members of a department, rather than simply members of the latter alone. Others would regard the dual commitment unnecessary, and would be unwilling or unable to participate fully in both the college and the department. This is especially likely to be the case for a faculty member in a college where the main interest of faculty and students lies in disciplines far removed from his own in subject matter and methodology. The majority believes that the department in most instances has been an effective unit of university organization, largely because it corresponds to the natural area of interest and concern for most faculty members.

## LARGE DEPARTMENTS

It is essential to deal with the problems that arise in large departments. We do not see any simple answer that will be appropriate in every case. In some instances the obvious answer to excessive size lies in the dividing of an existing department or faculty into two or more departments. This already has happened many times in the history of this university. A division may take place because of mere growth in size. Or in other cases it may arise because of a wide and continuing divergence within a department as to the appropriate areas within the discipline to be emphasized in future development.

The unanimous recommendations we shall be making for the internal and outside reviews of the affairs of every department and school will afford a useful opportunity to obtain an independent opinion on this question. Such reviews may point to the need to create new departments or schools, or to divide and regroup existing departments and schools. In yet other cases where there is broad agreement within a department as to its overall objectives, there still may be friction within it. Some or many members may feel that if they attend department meetings regularly their time will be wasted in discussing areas of specialization in which they are not involved. In these circumstances it may be appropriat to divide a department into sub-structures, each of which will deal with matters of academic concern to its members.
(ii) The system of decentralized organization in the federated college proposals would make it much more difficult to curtail non-essential duplication of courses and services in the university. Such duplication could arise readily because those responsible for curriculum in one college might not be sufficiently aware or concerned about what is being done in other colleges. To the extent that this overlapping occurred among different divisions, it would be more than difficult to eliminate. True, the Senate Budget Committee would review all budget proposals that emanate from the Academic Divisions But under the federated college system the Senate would not examine the academic details of new programs and courses. Therefore, in the opinion of the majority although the Senate Budget Committee could demand as much evidence as it wished, it is unlikely that this Committee would have sufficient knowledge to wield a skilful pruning knife.
(iii) Thus the task of the Senate in exercising proper surveillance over the whole academic enterprise would be made more difficult. Who then would perform this function? It is not the function of the Board of Governors to make strictly academic decisions. In making financial decisions the Board would have less authority than at present. Most financial decisions taken by the Board have academic implications and the
proposals explicitly include the provision that where this is the case the Board should be expected not to make decisions without the approval of the Senate. In these circumstances the burden on the President would be increased. He would tend to enlarge his staff of advisors, and to rely as much as he could on advice from his Vice-Chancellors and Vice-President. But each Vice-Chancellor would have his own division to defend, so that the President could not count on receiving disinterested counsel on contentious issues. The majority of the committee believes that the outcome would be a system of university government in which it would be even more difficult for the President to provide effective leadership than under the present system.
(iv) There is a danger under the federated colleges that at least some of the colleges would require what many faculty members and students would regard as excessive specialization. This is often a difficult as wel as contentious sort of problem under any system of university government. But at least under our present system it is clear that responsibility for dealing with this issue rests in the one academic forum that includes all the faculties-the Senate. In the proposed system each Academic Council would have this responsibility, subject to general Senate supervision. But each Council, composed of faculty members in the constituent colleges and institutes of the Academic Division, is less representative of the overall needs of the university than the present Senate. While appeals from the decisions of the Academic Councils could be carried to Senate, experience under the present Senate suggests that there would be a general disinclination on the part of Senat to take responsibility in an area that in fact had been basically delegated to the Academic Councils.

The entire committee is in agreement that changes are essential to create a more personalized environment for students and faculty-a problem in particular for the largest faculties and departments. We agree also that changes are needed to make it easier for interdisciplinary programs to be created and to be administered effectively

The majority believes that the difficulties referred to are not primarily to be solved by organizational changes because the problems arise from rather strongly held attitudes and beliefs about curriculum, teaching and research

This leads the majority to put more emphasis on changes which include the following: (i) creation of an orientation college in Arts and Science to assist students in the first two years of university work in choosing their programs for subsequent years; (ii) creation of a college of general studies for students who do not wish to take a major or honours in Arts and Science or a degree in a professional faculty; (iii) development of a closer link between the academic programs and the life of the residences; (iv) establishment of a promotions policy which avoids creating the impression, which is currently widespread, that teaching ranks substantially below research as evinced by publications as a criterion for promotion. This in turn involves making proposals for appropriate criteria to evaluate teaching.

## FIVE-YEAR OBJECTIVES

In addition, the majority favour the changes which are considered in the remainder of this chapter under recommendations 6 to 10 . Specifically favoured are: (i) the appointment of an administrator with the powers of a department head for newly organized areas of interdepartmental studies. Such a person would have a budget and the same authority as a department head in recruiting faculty members; (ii) the provision by departments, schools and faculties of statements of objectives for the next five years; (iii) the provision of review statements concerning activities of departments, schools and faculties at least every five years, prepared within these academic units; (iv) the provision of outside independent appraisal of the performance of departments, schools and faculties at least every five years; (v) the appointment of a standing committee of Senate to receive and review reports under (ii) to (iv) and to recommend to Senate any action thought desirable in the light of these reports.

MAJORITY RECOMMENDATION 5: We recommend that the present type of structure of faculties, departments and schools be retained with modifications to make the system more responsive to changing conditions, without the adoption of a federated colleges system.

The minority, who lost by only one vote on the federated colleges issue, also favours generally all nine of the above recommendations (those prior to Majority Recommendation 5), with such modifications as would be appropriate for a federated colleges system. But the
minority believes that these recommendations do not go far enough and advocates the following alternative ecommendation:

MINORITY RECOMMENDATION 5: We recommend that the Senate adopt in principle the federated colleges system for the University of British Columbia and that the Senate request the President, the Board of Governors, and all academic authorities in the university to implement such a system as soon as practicable.

Under the present structure of the university, most if not all university appointments in a discipline are made in the department which has responsibility for teaching and research in that particular discipline. Interdepartmental programs and institutes take care to recognize the academic primacy of the disciplines, and to relate appointments to the basic departments. In the interests of economy and effective academic co-ordination, the university up to the present time has resisted duplication of disciplinary departments.

## BASIC DISCIPLINES

On the whole this structure has furthered the development of the basic disciplines. It has been less successful in fostering emerging interdepartmental study areas, although two notable programs are exceptions to this, namely the Institutes of Oceanography and of Fisheries. Effective attack on many problems facing contemporary society requires the successful fusing of a variety of disciplinary skills. This fact indicates to us the need to have a structure that facilitates the emergence of interdepartmental studies, in response to the needs of society and the enthusiasms of faculty members experienced in the relevant disciplines. There is usually no budget for the direct employment of additional faculty by the interdepartmental organization. Yet such faculty members may be needed to obtain a properl diversified and balanced faculty team. These considerations lead to the following recommendation

RECOMMENDATION 6: We recommend that when the Senate and the Board of Governors approve of the establishment of a new interdepartmental program, (i) the Board be asked to appoint a head for the program with authority comparable to other department heads; and (ii) the Board be asked to provide a budget for the interdepartmental program that can be used to engage the services of faculty members.

As at present, such faculty members could, of course, hold appointments in a particular discipline as well as.in the new program. For administrative purposes new interdepartmental programs should be attached to the faculty with which its faculty members will be most closely related in terms of disciplinary interests. In majority of cases this is likely to be Science, Appli Science, Arts or Medicine.

RECOMMENDATION 7: We recommend that every five years each faculty, school and department be required to produce a statement of objectives for the next five years which would be forwarded to the President and to the Senate.

RECOMMENDATION 8: We recommend that every five year period each faculty, school and department be required to prepare a statement comparing its objectives as set out in previous statements with its achievements in the past five years. This statement should be sent to the President and the Senate.

RECOMMENDATION 9: We recommend that every five years the performance of each department, school and faculty should be reviewed by a committee appointed by the Senate in the light of both the statement of five year objectives and the wider needs of the university. Included in the matters under review should be the stewardship of the Head, the Director and the Dean.

RECOMMENDATION 10: We recommend that the Senate should elect a standing committee on academic review, with the following terms of reference: (i) to determine near the beginning of each academic year which departments, schools and faculties should be asked during that year to prepare (a) statements of five year objectives, (b) internal reviews of operations for the past five years, (c) independent outside reviews of operations for the past five years.
(ii) To indicate the topics to be covered in the statements of five year objectives and the statements of review. (iii) To receive submissions concerning the composition of outside review committees from students and faculty members. (iv) To appoint the members of the outside review committees, subject to the concurrence of the President. (v) To receive and consider the statements of five year objectives and the review statements, and to recommend to the Senate any actions deemed advisable in the light of these reports.

SIX western Canadian universities have formed a consortium called WESTARWestern Telescopes for Astronomical Research-to further construction of a 156 -inch telescope on Mount Kobau in the interior of B.C.
WESTAR will receive from the federal government the existing assets for the Mount Kobau project and launch a public appeal for $\$ 10$ million to enable completion of the telescope.

At a meeting on May 6, UBC's Board of Governors approved a proposal that UBC act as fiscal and business agent for the consortium and hold title to the assets turned over by the federal government. This proposal is subject to approval by the Boards of other participating universities.

UBC's Board also approved the appointment of Dr. Vladimir Okulitch, dean of science, and deputy president William M. Armstrong as UBC's representatives on the WESTAR Board of Management.

The question of the future of the Mount Kobau telescope has been in doubt since September of last year when the federal government announced it was cancelling the project as an economy measure.

In the ensuing months, Dean Okulitch, an amateur astronomer himself, succeeded in arousing interest at six western Canadian universities for the formation of a consortium which would be able to continue the project.

Consortium members to date are UBC and the Universities of Victoria, Calgary, Lethbridge and Alberta and Notre Dame University in Nelson. A possible additional member of the consortium is the University of Saskatchewan.

Dr. B.G. Wilson, dean of arts and science at the University of Calgary and an x-ray astronomer, was elected chairman of the consortium at a meeting held at UBC May 1. He said any interested Canadian university would be welcome to participate in the consortium's work.
He said the government decision to turn over the assets to the consortium "represents a major step forward with respect to facilities for astronomical research and astrophysical research in Canada. The consortium has now considered organizational arrangements which might meet the government requirement and its members will be seeking approval from their respective universities regarding their recommendation."

The assets to be turned over to the consortium are valued at more than $\$ 4$ million and consist of a 156 -inch fused quartz mirror blank which weighs 17 tons and is currently stored at the Corning Glass Works in New York state; the machine which will grind and polish the blank, which is currently stored in Vancouver; various peices of optical equipment for use in the grinding and polishing process and the engineering plans for the telescope. The consortium has also been guaranteed the use of the Mount Kobau site itself for erection of the telescope.

IHE site, near Oliver, B.C., is served by an access road for movement of heavy equipment and includes a trailer camp, a dieseloperated power station and a number of meteorological and astronomical instruments. The site has been leased by the provincial government to the federal government for a period of 99 years.

The federal government has also given assurances that federal astronomers would continue to give technical help in the grinding of the mirror, which is a four-year task, and construction of the observatory. In return,

## WESAR wil schn WESTRER SNIIES



UBC's dean of science, Dr. Vladimir Okulitch, left, and professor of astronomy Dr. Michael Ovenden scrutinize a model of the 156 -inch Mount Kobau telescope. Photo by Extension Graphic Arts.
federal government astronomers will be able to use the facility when it is complete.

A $\$ 10$ million public appeal is necessary to complete the telescope because participating universities are unable to commit capital funds to the project.

Dean Wilson said the name "Western Telescopes for Astronomical Research" had been chosen because it was hoped to coordinate work going on at other telescopes of various kinds in western Canada. A federal government radio telescope is located 15 miles north of the Mount Kobau site.

He said he expected approval of the consortium would be completed this summer and that members were optimistic about the prospect of raising funds over a ten-year period.

Various members of the consortium expressed enthusiasm for the telescope. Prof. Michael Ovenden, head of astronomy at UBC, said the mirror blank was, in his opinion, the best ever produced.

He pointed out that while the initial investment in the telescope would be high it would have a very long life. He said the 73 -inch telescope at the Dominion Astrophysical Observatory in Victoria was now 51 years old and still in active use.

If the Mount Kobau telescope was erected today it would be the second largest in the world, exceeded only by the Mount Palomar telescope in California. By the time the

Mount Kobau project is completed there will probably be other, larger telescopes in operation.
The Russians recently cast a 240 -inch mirror made of pyrex glass, which cracked during the cooling process and has had to be scrapped.

SEVERAL members of the consortium said they expected excellent viewing conditions at Mount Kobau. Dean Okulitch said research studies carried out last winter had labelled Mount Kobau an exceptional location for a telescope. For observation purposes, the Kobau site is judged to be superior to Victoria, as good as Mount Palomar, and almost as good as the site proposed for a telescope in Chile.

The disadvantages of the site are short summer nights for viewing purposes and weather conditions during the winter. "But we expect to have at least 1,400 hours of good observing time on Kobau," Dean Okulitch said.
Attending the May 1 meeting at UBC as representatives of the universities concerned with the WESTAR project were: Dean Wilson, University of Calgary; Deans Armstrong and Okulitch, Prof. Ovenden and Dr. W.C. Gibson for UBC; Dr. Earl Milton, University of Lethbridge; Prof. John A. Jacobs, University of Alberta, and Dr. J.L. Climenhaga, University of Victoria.

# Contact 

## CRACKS IN THE BLOC CAUSED BY NEWS MEDIA



UBC President Walter Gage congratulates winners of Alumni Awards of Student Merit, Anne Smith. (left) and Don Munton (right) at UBC Alumni Annual Meeting. UBC Extension Graphic Arts Ploto.

Communications media are causing cracks in the Communist bloc, says Stanley Burke, host of the Canadian Broadcasting Corporation's National TV News.

Burke, 46, a 1948 UBC bachelor of science in agriculture graduate, made the comment during his keynote address to the UBC Alumni Association annual meeting on May 7. More than 200 alumni attended the meeting, held in the UBC Faculty Club.

Another highlight of the annual meeting was the presentation of the Alumni Award of Merit to noted Canadian humorist and playwright, Eric Nicol. The award, the association's highest honor, goes annually to a UBC graduate whose contribution in his particular endeavor has been outstanding.

Nicol, a columnist with the Vancouver Province for 18 years, is the author of numerous books, TV and radio scripts and plays, and a three-time winner of the Leacock Medal for humor

Recognition was also paid to student achievement by the annual meeting. Alumni Awards of Student Merit, each carrying a $\$ 50$ book prize, were made to graduate political science student Don Munton and to third-year rehabilitation medicine student Anne Smith.

Munton received the graduate award for his contribution to student government, the University Senate and to residence life. Miss Smith was awarded the undergraduate award for her work in developing an active undergraduate society in rehabilitation medicine. UBC president Walter Gage made the presentations. (See picture at left).

The meeting also saw the election of new officers to the Board of Management, the body which governs the Alumni Association. Elected by acclamation as president for 1969-70 was Vancouver lawyer Sholto Hebenton, BA'57, BA(Oxford) '59, BCL(Oxford) '60, LLM(Harvard) '61. He replaces Stan Evans, BA'41, BEd'44, in the post. The other key members of the new executive are: First Vice-President, T Barrie Lindsay, BCom'58; Second Vice-President, Frank C. Walden, BA'49; Third Vice-President, Mrs. Frederick Field, BA'42; and Treasurer, William Redpath, BCom'47

## BEYOND 1969

## Conference Probes University Problems

"'I believe that higher education in British Columbia has reached the crisis point and that we must act at once if present and future generations of students are not to suffer irreparable loss of opportunity."

The former President of the University of B.C., Dr. F. Kenneth Hare, made this grim remark in a special news conference called last November to make the public aware of the difficult situation facing the University.

It is in recognition of this crisis that the UBC Alumni Association has organized Beyond 1969, a conference on B.C. higher education, to be held June 13 and 14 at Totem Park, UBC. The conference has been designed to give alumni and the public insight into the crisis facing B.C. higher education in general and UBC in particular. Outstanding speakers will discuss the problem, its implications and possible solutions.
" $\mid$ believe this conference is the most important project this association has undertaken in many years," conference chairman Barrie Lindsay said, in announcing the program. "If higher education is not to deteriorate in B.C., the public should be made to better understand the nature of the crisis which Dr. F. Kenneth Hare, the former president of UBC, pointed to so often.
"I don't believe either the public or our alumni fully appreciate the problem of financing and 8/UBC Reports/May 28, 1969
planning higher education. This conference is designed to both provide information and to stimulate thought and action.

The conference keynote address will be given Saturday morning, June 14, by UBC President Walter Gage. The remainder of the day will be taken up with a series of major speeches, panels and discussion sessions.

Former UBC president Dr. John B. Macdonald, who is now executive vice-chairman, Committee of Presidents of the Universities of Ontario, will give the banquet address Saturday evening. He will speak on "Administration of Higher Education in Ontario.'

Other conference speakers include: UBC Deputy President William Armstrong; Dr. Ian McTaggart-Cowan, UBC dean of graduate studies and chairman of the B.C. Academic Board; John Young, Campbell River Secondary School principal; Andrew Soles, principal of Selkirk College; Dean Goard, principal of the B.C. Institute of Technology; Dr. Cyril Belshaw, UBC head of anthropology and sociology and chairman of UBC Senate Committee on Long-Range Objectives; Ture Erickson, head of the Sedgewick Library, UBC; Michael Doyle, UBC Alma Mater Society external affairs officer; Susan Shaw, chairman, UBC Alma Mater Society High School Visitation Committee; Sholto Hebenton, UBC Alumni Association president; Barrie Lindsay, UBC Alumni Association first vice-president; Frank

Walden, second vice-president; and Jack Stathers UBC Alumni Association executive director.

If you would like to attend, please complete and mail the accompanying coupon to the UBC Alumni Association, 6251 N.W. Marine Drive, Vancouver 167, B.C.

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