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ABSTRACT

The Commission on Academic Development was established to examine the goals and development of the University of Victoria and related issues. This document includes the appendixes to their report and contains: (1) the call for submission to the commission; (2) a list of submissions, bibliography, and other source documents; (3) report on university programs in Great Britain; (4) a report on the academic future of the University of Victoria (1963); (5) chronological review of major academic decisions; (6) student questionnaire; (7) interim report of studies on grading practices (September 1972); (8) continuing education courses (1966-72); (9) the president's research support advisory committee; and (10) research funds allocation (1968-73). (Author/KE)

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REPORT
of the
COMMISSION ON
ACADEMIC DEVELOPMENT

Appendices

UNIVERSITY
of
VICTORIA
1973

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APPENDIX A

Call for Submissions to the Commission

MEMORANDUM

University of Victoria

TO All Faculty and Administrative Personnel

January 28, 1972

Date

FROM Dr. H. E. Farquhar, President designate

I am pleased to announce the appointments of the following colleagues to membership on the Commissions to Study Academic Development and Academic Governance.

ACADEMIC DEVELOPMENT

Dr. D. J. MacLaurin - Chairman
Dr. John M. Dewey
Dr. G. Reid Elliott - Secretary
Dr. Walter Muir
Dr. W. R. D. Sewell
Professor P. T. Young

ACADEMIC GOVERNANCE

Dr. S. A. Jennings - Chairman
Dr. Alan Gowans
Mr. Dean Halliwell
Professor A. E. Loft - Secretary
Dr. G. O. Mackie
Professor N. A. Swainson

These men are highly qualified for the tasks that they have accepted. They represent a great depth of experience in University affairs. The Commissions will sit for the next six months and will submit their final reports to the President of the University by the end of August, 1972.

I am grateful to the many people who have expressed an interest in the studies and assume that all members of faculty and of the student body will present submissions to the Commissions if they so desire.

Offices for the Commissions will be located in building "G" which will be ready for occupancy by February 7th.

MEMORANDUM

University of Victoria

Dean David J. Chabassol

TO: Dean John L. Climenhaga

February 25, 1972 Date

Dean Peter Garvie

FROM: Hugh E. Farquhar

Re: Commission on Academic Development

It is my view that the Commission on Academic Development should very soon attend meetings of the various departments of your Faculties so that members of the Commission may:

Listen to the views and opinions of the Department and its members on what are and what might be the on-going academic plans of the Department, and how these form a part of what they consider should be the academic stance and contribution of our University.

I have asked the Commission to consult with each of you on arrangements for these meetings, as I consider direct interaction between departments and the Commission most important. I know how difficult it is to schedule departmental meetings. Therefore it would be appropriate to include some cancellation of lectures so that colleagues could attend such a meeting.

It is planned to hold such meetings throughout the period March 13 through April 14. Probably the meetings will be about two-hour afternoon sessions, and I suggest that all departments now initiate plans on that basis.

Hugh E. Farquhar

hef:cc

cc - All Heads and Chairmen

The following letters appeared in The Martlet March 23, 1972.

The Editor
The Martlet
University of Victoria
Victoria, B.C.

Dear Sir:

May I use your columns to speak to the university community and in particular, students who have strong convictions about the concept of a university and the academic direction this university is taking.

In January President Farquhar appointed the Commission on Academic Development to study and "consider the feasibility of new types of programmes and new areas to be explored ... and all aspects of academic growth and development". At the very minimum, these terms of reference would include: consideration of the establishment of new faculties, schools and departments; the role of faculty and student research; the extension of the university into the surrounding society; the role and necessity of present departments and programmes; the feasibility of possible alternatives to the present system of teaching undergraduates; the ambitions and expectations of faculty and students and the public outside; the university or scholarship as an end in itself; scholarships as a means to 'self-fulfillment'; the university as a means for attaining or as a 'training ground' for a career outside its boundaries; the organization of the academic year; the values and effectiveness of the lecture system, and; the place of graduate studies in the University.

The Commission is now meeting with all academic departments of the university to hear their view on the above and related issues: In all good conscience, the Commission cannot say that its investigation is complete unless it has similar presentations from students.

There are three definite avenues open through which we students can feed in our comments and concerns to the Commission. One is by contributing to the composition of a brief which the Alma Mater Society will be submitting to the Commission; the second, is by responding to a questionnaire which will soon be available; and, the third is by direct presentation to the Commission itself, or to its individual members. All of these methods will be of significant value if, and only if, we make use of them and I strongly urge that you do so, as it is essential that this commission has inputs of information from all sectors of the university.

cont'd.

The Martlet, March 23, 1972

2.

Contributions to the A.M.S. brief should be submitted verbally or in writing as early as possible to Dave McGregor or Dave Climenhaga. The questionnaires will be available from Monday, March 27th until the following Thursday at the Martlet distribution points and can be deposited in the accompanying boxes. Arrangements to meet with the Commission can be made through Mrs. Clements, Commission Secretary, at 477 6911 (ext. 898) or at the Commissions offices in "G" Hut.

Russell Freethy
President
Alma Mater Society

The Editor
The Martlet
University of Victoria
Victoria, B.C.

Dear Mark:

Russ Freethy very kindly let me read the above letter. On behalf of the Commission and personally I am most happy to join with Russ and urge all students to use the Commission as a channel to make certain their views are known.

Sincerely,

D. J. MacLaurin
Commission Chairman



UNIVERSITY OF VICTORIA
VICTORIA, BRITISH COLUMBIA

Office of the President

June 1, 1972

TO : All members of Faculty and Administrative/Professional Staff
FROM: Hugh E. Farquhar, President

The Chairmen of the Commissions on Academic Development and Academic Governance inform me that the work of their Commissions will be completed on schedule by the end of August or early September. Because the reports of these Commissions will deal with matters of vital interest to us all, and will form the basis for appropriate action in due course, it is important that there be maximum input from the faculty and administrative professional staff. The Chairmen of the Commissions have therefore agreed to extend to June 30, 1972, the deadline for the receipt of briefs and submissions.

May I urge all of you who have ideas or points of view on Academic Governance or Academic Development of this University to communicate them to the appropriate Commission. The Commission offices are located in Hut "G" and the Chairmen may be reached by telephone locals 898 or 899.

Hugh E. Farquhar

HEF:gd

APPENDIX B

List of Submissions, Bibliography and
Other Source Documents

APPENDIX B

Source Materials Used by the Commission

1. Commission Meetings with Departments, Groups, and Individuals.

Alma Mater Society	March 1972
Department of Physics	March 1972
Department of Anthropology & Sociology	March 1972
Department of Chemistry	March 1972
Students; <u>Martlet Reporter</u>	March 1972
Special Meeting - Commission and Department of Chemistry	March 1972
Department of Psychology	March 1972
Department of Hispanic & Italian Studies	March 1972
Department of Slavonic & Oriental Studies	March 1972
Dr. A. R. Fontaine	March 1972
Department of Classics	March 1972
Department of Bacteriology & Biochemistry	March 1972
Mr. J. T. Matthews	March 1972
Department of History	April 1972
Department of English	April 1972
Faculty of Education	April 1972
Department of Mathematics	April 1972
Dr. L. E. Devlin	April 1972
Department of Political Science	April 1972
Department of Geography	April 1972
Department of Economics	April 1972
Department of Germanic Languages & Literature	April 1972
Department of Philosophy	April 1972
Dr. Bryan Gooch	April 1972
Department of French Language & Literature	April 1972
Faculty of Fine Arts	April 1972
Department of Linguistics	April 1972
Faculty of Education	April 1972
Department of Biology	April 1972
Mature Students' Association	April 1972

2

Commission Meetings with Departments, Groups,
and Individuals - cont'd.

Committee on College System	April 1972
Graduate Students	April 1972
Department of Psychology	April 1972
Re: Master's Programme in General Science	May 1972
Open University Meeting	May 1972
Dean J. L. Climenhaga	May 1972
Dr. R. B. Hunter, University of Birmingham	May 1972
Department of Music	May 1972
Dr. T. R. Warburton	May 1972
Professor J. Dobereiner	June 1972
Division of Continuing Education	June 1972
Mr. R. W. McQueen	June 1972
Dr. O. M. Abrilo	June 1972
Pacific Rim Studies	June 1972
Dr. B. J. Ballantyne	June 1972
Dr. G. V. Downes	June 1972
Physical Education Section of Faculty of Education	June 1972
Professional Librarians	June 1972
Mr. J. T. Matthews	June 1972
Dr. James Ward for Dr. J. D. Ayers	June 1972
Professor R. R. Jeffels	June 1972
Mr. M. Elcock, Athletic Director	June 1972
Mr. A. E. Soles, Superintendent, Post-Secondary Services, Department of Education	June 1972
Department of Theatre	June 1972
Athletic Directorate	June 1972
Dr. J. E. Hendrickson	July 1972
Dr. R. A. Hedley, with Dr. J. M. Dewey	July 1972
Dean, Faculty of Graduate Studies, Dr. S. A. Jennings	July 1972
Dean, Faculty of Education, Dr. K. G. Pedersen	July 1972
President Hugh E. Farquhar	July 1972
Dean, Faculty of Arts & Science, Dr. J.-P. Vinay	July 1972
Dean, Faculty of Fine Arts, Dr. P. L. Smith	July 1972

Commission Meetings with Departments, Groups,
and Individuals - cont'd.

Board of Governors	July 1972
Mr. E. R. Fleming, Campus Canada Manpower	July 1972
Dr. H. D. Beach, with Dr. J. M. Dewey	July 1972
Camosun College representatives (Dr. Grant Fisher & colleagues)	July 1972

In addition, the Commission held nineteen (19) business meetings in the period 24 February and 8 October 1972. The Minutes of all the above meetings are on file.

2. Submissions and Reports received by the Commission

The submissions covered such a wide range of topics that ordering under subject readings was not possible and they are listed in the approximate order in which they were received by the Commission, together with the name of the originator, who may not have been the author.

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|--|--|
| 1. School of Public Administration & Supplementary Documents | Academic Planning Committee;
R. I. Cheffins, W. C. Shellard,
N. A. Swainson. |
| 2. Ideal Programme for History in Art | A. Gowans |
| 3. McGill University reprints from the Centre for Learning and Development, Vol. 1, 2 | Bruce Partridge |
| 4. Re: The Setting Up of the Task Forces | Charles B. Daniels |
| 5. Speech Pathology & Audiology | O. Spreen |
| 6. Trent University - "Canadian Studies Program" | President T. H. B. Symons |
| 7. University of Birmingham Consultative Document | Dr. R. B. Hunter, Vice-Chancellor, U. of Birmingham |
| 8. "Reporter" - Synopses of Papers given at Administrators' Conference on Accountability | University of Calgary |
| 9. Law Faculty Brief & Supporting Documents | Academic Planning Committee |
| 10. A Survey of Administrative Practices | R. E. L. Watson |
| 11. Re-Organization of the BCTF - A Total System Viewpoint | B.C. Teacher's Federation |
| 12. Proposal to Create a Department of Creative Writing at UVic | Robin Skelton, et al |
| 13. Wright Report - Commission on Post-Secondary Education in Ontario | Robert Lawrence |
| 14. Colorado College Plan and other documents | Max S. Power |



- 15. Simon Fraser University Planning: A Discussion Paper (1971). Dr. K. T. Strand
- 16. Academic Conditions of Appointment University of Tasmania
- 17. Team Investigation Projects University of Windsor
- 18. College & University Planning, 1969 R. G. Smith
Colgate University
- 19. List of briefs submitted to Academic Planning Committee G. B. Friedmann,
Academic Planning Committee
- 20. Articulation Committee (Final Report to President 13 Mar 70) R. Ferry
- 21. Re: Law School, School of Nursing, School of Public Administration E. R. Lloyd, Manager
Office Services
- 22. Re: Enrolment Practices R. J. McCue
- 23. Computer Facilities in Canadian Universities University of Toronto
- 24. Distribution of Bachelors' Degrees in Arts & Science Faculty 1968-1971 W. R. Gordon
- 25. Proposal for Program of Environmental Studies W. R. D. Sewell, R. G. B. Reid,
M. A. M. Bell
- 26. Minutes of Department of Chemistry with reference to discussion with Commission S. A. Ryce
- 27. Discussion Paper re: The Department of Economics L. I. Bakony
- 28. Change in the University John Peter
- 29. Linguistic Departments' Commitment to Indian Language Work H. J. Warkentyne and
G. N. O'Grady
- 30. Phonetics Library Linguistics Department
- 31. Questions concerning academic aspects of the University Keith Hastings
- 32. Priorities from Physical Education Physical Education Students' Questionnaire
- 33. Physical Education Organizational Structure F. L. Martens, R. D. Bell,
J. D. Eckerson



34. The Role of Summer Session	J. Beattie MacLean
35. Position Paper on Graduate Studies at the University of Manitoba	University of Manitoba
36. Comments on Wright Report	University of Toronto Bulletin
37. UVic and The Fine Arts	Robin Skelton
38. Submission -- Academic Development	Daniel J. Koenig
39. University College of Continuing Education	L. E. Devlin
40. Higher Education, 1980: New Federal Projections (U.S.)	Chronicle of Higher Education
41. Development of the Department of Visual Arts	N. Toynton
42. UVic and the Fine Arts: A Suggestion for Long Term Developments	Robin Skelton
43. Concept of courses and recommendations	John Greene
44. Re: Graduate Work	G. G. Bancroft, Graduate Student Representative
45. Concerns of the Humanist	Prof. Geo. Whalley, Humanities Council for Canada
46. Re: Department of History	Charlotte Girard
47. "Publish or Perish"	R. J. McCue
48. Survey of Evolution of Linguistics, Department	Department of Linguistics
49. Re: Adapting the Collège System	Jim Riddell
50. Proposal for a Liberal Education Option	Charles B. Daniels
51. Proposed Training Programme for Child Care Workers	W. H. Gaddes
52. Brief on Graduate Teaching Experience	H. E. Tryk
53. Suitable Title for Clinical or "Adjunct" Staff from the Community	W. H. Gaddes



- 7.
- | | |
|--|---|
| 54. A University of Victoria Press | David B. Waterlow |
| 55. Re: University of Victoria policies | Mrs. Tannis Warburton |
| 56. Chemistry Club | P. Raine |
| 57. Mature Students' Group | Milt Wright |
| 58. Biology Club | Paul Rankin |
| 59. Friday Afternoon People | Wayne Cooper |
| 60. University Standards | W. P. Kinsella |
| 61. A Matter of Priorities | Shirley Baird |
| 62. Proposal for a Cross-Disciplinary Center at the University of Victoria | R. A. Higinbotham and
C. B. Daniels |
| 63. Child Care Workers | Department of Psychology |
| 64. Proposal for a Liberal Education Option | Department of Philosophy |
| 65. Social Work 400 - A Class Project | John Eldridge |
| 66. Degree Programme for Part-time Students | President W. H. Gage |
| 67. Proposed Master's Programme in Health Services Planning | University of British Columbia |
| 68. Re: The Wright Report | Laurentian University Journal |
| 69. Post-Doctoral Education in Ontario Universities 1969-70 | McMaster University |
| 70. Report on the College System | David Leeming, Chairman |
| 71. Proposals for Academic Development at the University of Victoria | T. Rennie Warburton |
| 72. Biology Department Minutes with reference to MacLaurin Commission | G. O. Mackie |
| 73. "The Scholarly Community" | L. E. Devlin |
| 74. The Dilemma of French Language Teaching | Report by Prof. F. Deloffre sent by O. M. Abrioux |
| 75. Academic Development in the Department of French | Elaine Limbrick |
| 76. Graduate Work | J. R. Walters |
| 77. Re: "Scholarship" in Germanic Studies | J. Beattie MacLean |

- 8.
78. Re: Arthur Porter's "Towards a Community University" and excerpted recommendations Phoebe Noble
79. Psychology Clinic in Cornett Building O. Spreen
80. Physical Education and Athletics Physical Education Section
81. Marine Biology H. D. W. Bridgman
82. The Open University Ernest Hunter, Director of Marketing
83. Britain's Successful University of the Air E. E. Askinas & Roberta L. Hall
84. Queen's University Reports on Academic Development Information Officer, Queen's University
85. Master's Programme in "General Science" R. Buckler, Reynolds Secondary School
86. Report of Commission on Undergraduate Education Dalhousie University
87. Priorities of Academic Programmes Academic Planning Committee
88. Submission to the Perry Commission (1968) Board of Governors, UVic
89. Correspondence relating to representations by the Institute of Chartered Accountants, and copy of their brochure J. E. Currie
90. Research Grants Awarded to Faculty 1971 J. E. Currie
91. Enrolment Figures in Commerce 151 (10-year period) R. W. McQueen, Bursar
92. Development of Centennial Stadium D. V. Ellis
93. The University Athletic Programme Athletic Directorate, M. Elcock
94. Re: Evening Courses; Research Associate Position; Faculty Research Fund D. J. Ballantyne
95. Financial assistance to Graduate Students G. W. Bertram
96. Proposal for the Establishment of Teacher Renewal Centers R. L. Williams & L. D. Yore
97. Future Academic Development of Theatre Department B. McIntyre

- 98. Re: Faculty of Fine Arts J. Doberëiner
- 99. A Credit-No Credit Grading System A. E. Hurd
- 100. A Center for Interdisciplinary Studies at UVic A. E. Hurd
- 101. Commitment on Teaching Effectiveness J. A. Burke, C. E. Picciotto, G. A. Beer, F. I. Cooperstock
- 102. An Assembly on University Goals and Governance: A Summary of 85 Theses to Stimulate Academic Reforms Education 573
- 103. Towards a Film Library for the University of Victoria D. E. Hamilton, Chairman, Library Audio-Visual Committee
- 104. University of Victoria Library Collections Policy Library Association
- 105. Library Participation in Book Selection & Collections Development Library Association
- 106. Bibliography Training Library Association
- 107. Library Participation in Academic Development Mrs. June Thomson
- 108. Guidelines for Departmental Reading Rooms D. W. Halliwell
- 109. Report on Native Indian Students at UVic A. Richard King
- 110. Proposals by Victoria District Registered Nurses Association of British Columbia Miss E. J. Lampitt
- 111. Re: Environmental Studies Roger Wiles
- 112. Pacific Studies Programme Bryan Farrell, Chairman
- 113. Teaching Really Matters, Or Does It? R. Alan Hedley
- 114. Synopsis: "The Medium May Be Related to the Message" R. Alan Hedley
- 115. College Instruction by TV R. Alan Hedley
- 116. University Admission Requirements Circulars Department of Education Victoria, B.C.



117. A White Paper Concerning the Intramural Activities Program for the University of Victoria, 1970 Norman F. E. Olenick
118. The Counselling Centre H. D. Beach
119. Intramural Athletic Program Miss Linda Flavelle, Intramural Athletic Chairman
120. Re: Committees R. N. O'Brien
121. No Teaching Jobs for Education Grads - Article re Survey Mrs. M. Small
122. Final Report of the Committee to Advise the President on Visual Arts A. D. Kirk, et al
123. Re: Graduate Sector Colin K. Campbell
124. Proposed Program for a School of Physical Education F. L. Martens
125. The University in Contemporary Society (Symposium Papers), 1969 Hugh E. Farquhar, Editor
126. Proposals by Victoria Labour Council L. Ryan, Secretary-Treasurer
127. Academic Development R. Haig-Brown, Chancellor
128. Centre for Environmental Education A. H. Acara
129. Policy Statement on Extramural Athletic Programmes in Canadian Universities Robert F. Osborne, School of Physical Education & Recreation, U.B.C.
130. A Proposal for Improving Teaching through Calendar Reform Max S. Power
131. B. C. Telephone Report - "Our Corporate Environment - 1985" J. E. Currie
132. College of Liberal Studies G. B. Friedmann, Senate Academic Planning Committee
133. Report on Requirements & Salaries University Graduates, 1972 E. R. Fleming, Campus Canada Manpower
134. Proposals by Victoria Chamber of Commerce T. W. Farmer, President
135. School of Optometry & supporting documents R. J. Grundison

136. President's Report - 1965-66 University of Victoria
137. President's Report - 1967-68 University of Victoria
138. President's Report - 1968-69 University of Victoria
139. Canadian Association of Graduate Schools 1970
Statistical Report R. W. Martin,
University of Calgary
140. Report on English 110 G. G. McOrmond

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29th Pacific Northwest Conference on Higher Education, Portland,
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APPENDIX C

Report on University Programmes
in Great Britain

Walter Muir
1972

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THE-BRITISH UNIVERSITIES

Introduction

It was the feeling of the Commission that its deliberations could be enhanced by a better understanding of the current academic environment in the British universities. Of particular interest was the effect of the report of the Robbins Committee on Higher Education (1963) on university planning and development in Britain. In addition, the British Open University, which first enrolled almost 25,000 students in January 1971, had come to the attention of the Commission as a new and exciting approach to university education.

The desirability of obtaining information from Great Britain was reinforced by discussions with two British visitors to the University of Victoria in the Spring of 1972. Dr. R. B. Hunter, Vice-Chancellor of the University of Birmingham, described the deliberations and initial report of the "Review Body" set up by the University to "Consider the role, the constitution and functioning of the University of Birmingham and to make recommendations to Council for any desirable changes." This endeavour was parallel to the tasks of the Commissions on Academic Development and Governance at the University of Victoria.

Dr. Joan Mason, a member of the Faculty of Science of the British Open University, presented a brief overview of the functioning of this massive attempt to provide a university education to any person over the age of 21 who had missed the

2.

opportunity for a formal university experience.

As a consequence, one member of the Commission was given the responsibility of visiting several British universities. The report of those visits is presented here:

The Universities

In addition to the University of Birmingham and the Open University, the Commissioner visited the Universities of Leicester, East Anglia, Dundee, and Stirling. Of these, Leicester (in 1957) and Dundee (in 1967) had achieved independent university status following long and successful affiliations as colleges of senior universities (London and St. Andrews, respectively). East Anglia and Stirling were both incorporated in 1964 as a direct outcome of the Robbins Report. All four universities would be considered of medium size and in several ways similar to the University of Victoria.

The Robbins Report

In February of 1961, the British Government appointed a committee of 12, chaired by Lord Robbins, to "review the pattern of full-time higher education in Great Britain and in the light of national needs and resources to advise Her Majesty's Government on what principles its long-term development should be based." With this mandate in hand, the Committee submitted its Report together with 178 concise recommendations.

The first recommendation of the Report established the

tone for the 177 that followed: "Compared with the 216,000 students in full-time higher education in Great Britain in 1962/3, places should be available for about 390,000 in 1973/4 and, on present estimates, for about 560,000 in 1980/1." (More recent evidence suggests that the stated figures have underestimated the actual number of places needed.) The Robbins Report has had profound effects on the British university system, not the least of which has been the creation of several completely new institutions.

The following recommendations, virtually all of which have been implemented in some degree, have been selected for their special relevance to the tasks of the present Commission, and are presented in their original form.*

8. There should be research by an independent body into the extent to which aptitude tests might supplement other features of the selection process.
9. The Secondary School Examinations Council, or its successor, and the Committee of Vice-Chancellors and Principals should devise means whereby they can discuss problems affecting the transition from school to higher education. Associations of teachers should be consulted and recommendations published from time to time.
10. There should be more contacts between individual schools and local education authorities on the one hand and institutions of higher education on the other.
11. Teachers in institutions of higher education and in the schools should collaborate in the revision of school syllabuses and textbooks.
12. Curriculum research and development and the training of school teachers in new methods should be fostered.
14. A higher proportion of students should receive a broader education for their first degrees.

* Higher Education, Report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins, 1961-63. London, 1963, pp. 277-290.

15. There should be more courses involving the study of more than one main subject.
19. More individual attention should be given to Ordinary degree students.
23. The proportion of graduates proceeding to postgraduate work should be increased from 20 per cent. to 30 per cent by 1980.
24. More awards should be available for postgraduate study, particularly in the social sciences and the humanities.
25. There should be better arrangements for the supervision of postgraduate students.
26. More graduates who wish to go on to postgraduate work should be encouraged to do so at a university other than the one at which they took their first degree.
27. The universities should consult together about courses of study at undergraduate and postgraduate level to ensure that arrangements complement each other and that there is a measure of uniformity in standards and nomenclature of degrees.
63. The links between university institutions and government research establishments and industry should be strengthened by freer movement of staff and more joint arrangements for research and the supervision of research; and the institutions should invite more part-time teaching assistance from the research establishments and from industry.
64. Courses in subjects relevant to business problems may properly be taken at the undergraduate stage, but education for management as such should be a subject for postgraduate study, often after a period of experience.
85. In future detailed planning should be made for a period extending ten years ahead.
86. Those responsible for policy should also be provided with estimates covering the following decade.
101. Those who wish to embark on or resume higher education later in life should be encouraged to do so.
105. The present student/staff ratios in university institutions particularly concerned with research and postgraduate training should be maintained and, when practicable, improved.*
110. There should be good facilities and enough funds for research, generous allowances of sabbatical leave and adequate secretarial and technical help.
114. In some universities more use should be made of postgraduate students for informal teaching and the conduct of discussion groups.

* i.e. lower than 8:1

115. Because teaching and research are complementary, research should not be removed from universities and concentrated in research institutes.
117. In appointing and promoting staff more weight than at present should be given to qualities other than distinction in research, and in particular to ability as a teacher.
119. More teaching should be undertaken in small classes; lectures should normally be devoted to the exposition of principles to large audiences.
120. Every student should be assigned to a tutor and should receive regular personal guidance.
121. Every student should be regularly set written work, which should be returned and discussed with him.
122. Discussion periods should complement lectures.
123. All newly-appointed junior teachers should have organised opportunities to acquire the techniques of lecturing and conducting discussion groups.
124. Universities should consult together about methods of examination. The Council for National Academic Awards should promote the exchange of views and information on examination methods amongst institutions of further education.
125. The success or failure of a student should depend only on his ability and attainment; in no university faculty should there be a percentage of students whom it is customary to fail.
126. Every university department should keep the wastage (failure) rate continuously under review.
127. In further education wastage rates should be reduced by the provision of a wider range of courses at degree level and by more attention to teaching methods.
130. Students should spend a large part of their vacations on work related to their fields of study and grants should be assessed accordingly. They should receive guidance on how to use the vacations and should be required to give evidence that the time has been profitably spent.
168. Research into higher education should be encouraged both by the various responsible organs of government and by private foundations.
169. There should be an appropriate organisation of governmental statistical services to ensure that adequate statistics relating to education as a whole are collected and analysed on a uniform basis.

Most of the factors underlying these recommendations were mentioned in submissions to the Commission on ~~Academic~~ Development. The Robbins' Committee recommendations have provided one point of reference against which the present Commission has been able to formulate and judge its own recommendations for future policies at the University of Victoria.

Planning, Development and Financing

Virtually absolute power is held by the central University Grants Committee (UGC) in the control and disbursement to universities of governmental funds. Hence, planning and development is carried out at the university level in relation to guidelines laid out by the UGC. In recognition of the need for long-term planning, each university is obliged to prepare a "Quinquennial Submission" for the UGC, in which the rationale for requested funds is clearly laid out for the ensuing five year period. (This year marks the beginning of the 1972-1977 quinquennium.) The submissions are evaluated by the UGC in terms of established priorities and the total funds available. The universities are then informed of the extent to which their individual submissions will be supported.

Ideally, five-year budgetting should provide for an ease of long-term planning, which to a certain extent is the case. However, due largely to the immense tasks of apportionment and control assigned to the UGC, years one and five of each quinquennium have tended to be periods of uncertainty leading to

inaction. As a result, quinquennial budgetting is considered to be most effective during periods of relative stability, but less so during rapid expansion.

At the university level, planning is carried out mainly by senior academic staff under the direction of the Vice-Chancellor or Principal. Inter-university communications at the most senior level are facilitated by the Committee of Vice-Chancellors and Principals which meets periodically.

Organization and Administration

With the exceptions of Oxford, Cambridge, London and Durham, which function under the "college system", most British universities (including the Open University) tend to have similar administrative structures, although some differences between English and Scottish universities do exist.

The Court is the body normally considered to hold the ultimate authority of the university. Its composition, as defined by the University of Birmingham, is a combination of academic and lay representatives and as such provides a link between the university and the regional community. The Court receives various annual reports and appoints the Chancellor as well as various officers and most of the lay members of the Council. The Court is seen as "a useful check on the actions of the Council."

The Council, too, is a combined lay-academic body which has as its major responsibilities, "the government and



control of finances of the University and of the discipline, practical affairs, business, and work of the University." The Council is responsible, therefore, for all functional aspects of the University, but in practice has delegated academic matters to the Senate.

The Senate, as it is presently constituted, is composed of the Vice-Chancellor or Principal, the Pro-Vice-Chancellor, the Deans, the Professors (i.e. "full professors") and non-professorial Heads of Departments. The Senate functions to regulate and control the academic curriculum, including the discipline of students.

The Vice-Chancellor and/or Principal holds a position that is essentially equivalent to that of the President in North American universities. He is the senior academic officer of the University, and is supported in this role by one or more deputies.

The academic Deans tend to be elected by the faculties from the ranks of the professorial staff, and play a coordinating role among the departments. The Head of Department is almost universally one of the senior Professors, and tends to maintain almost absolute control of, and responsibility for, the functioning of his department.

The "teaching staff" of the university is comprised of four ranks: the Professor, who normally holds the "chair" in the department (large departments may have more than one chair,

and hence more than one professor); Readers, who are senior staff members who have displayed a particular interest and ability in research activities; Senior Lecturers, who are similar to Associate Professors; and, Lecturers, the equivalent of Assistant Professors. There are, in addition, Instructors, as well as teaching, laboratory, and research assistants.

Admission to British Universities

The Universities Central Council on Admissions (UCCA) is located in Cheltenham and was set up in 1961 to provide a uniformity in admissions policies and procedures for almost all British universities (the exceptions are the Open University, and the Universities of Aberdeen, Glasgow, and Strathclyde which require that the applicant appeal directly to them). It is the duty of the UCCA "to enable the business of admission to undergraduate courses in all United Kingdom universities to be dealt with in an orderly manner, and equally important, in a way which gives proper freedom to the individual candidate in making a responsible choice without interfering with the equally proper need of individual universities to select the students they wish to have."*

The admissions procedure normally requires the applicant to have passed either, the United Kingdom General Certificate of Education examination, or the Scottish Certificate of Education examination, in at least five approved subjects. Of these,

* How to Apply to a University. Cheltenham: The Universities Central Council on Admissions, 1971.

at least two must be at the "Advanced" level. Individual universities may have additional requirements which are stated in Prospectuses that are published at least twelve months in advance of the academic year to which they apply.

Applicants are required to submit to the UCCA, in order of preference, a list of up to five universities of their choice. These must be received by the UCCA between September 1st and December 15th of the year prior to admission to university.

(Applications to Oxford and Cambridge must be received by October 15th because of additional selection procedures.) The UCCA transmits the candidate's application to the selected universities, who then decide on his acceptability and inform him directly of their decisions. Candidates are admitted to the university, but not necessarily into a departmental programme. Acceptance into a given programme is normally at the discretion of the department. The candidate, therefore, must establish his entry into the study programme of his choice by direct communication with the department Head.

The UCCA receives in the order of 130,000 applicants, or about one half million selections per year. Approximately two-thirds of the applicants are successful in obtaining university entrance; these constitute about seven or eight per cent of the national age group. The proportion of students entering a given programme however, varies with the field of study, with competition being keener in the arts, social studies

and medicine than in the physical sciences and technology. Indeed, many physical science "places" remain vacant due to a lack of qualified applicants.

When a citizen of the United Kingdom is admitted to the undergraduate programme of a British university, his tuition and accommodation are provided for, on condition of satisfactory achievement, by state funds.

Undergraduate Degree Programmes

The undergraduate degrees offered by British universities are similar to those offered by universities in Canada. There are, however, several differences between the programmes offered by English and Scottish universities.

The English B.A. or B.Sc. is normally granted as one of four classes of an honours degree, after three years of study. Provision is made for a "pass" standing when the honours level of achievement is not reached, but where the candidate is deemed worthy of the degree.

It has been the tradition in Scottish universities to offer a three-year "ordinary" degree and a four-year honours degree for superior students who wish to specialize and proceed to graduate study. (This approach has been adopted by several Canadian Universities.) In addition, the older Scottish universities of St. Andrews, Aberdeen, Edinburgh and Glasgow, and also Dundee, offer the M.A. as the first degree in an arts programme. Edinburgh now offers the B.A. as its ordinary arts degree

and the three new Scottish universities, Heriot-Watt, Stirling, and Strathclyde have adopted the B.A. as their first arts degree.

Courses leading to the B.Ed. degree tend to be offered in conjunction with local colleges of education and are restricted to superior students in the colleges. The University of Stirling, however, has introduced a B.A. degree with a major in education; a unique departure from this tradition.

The structure of degree programmes tends to ensure rather broad learning experiences during the first half, with specialization occurring during the last half of the programme.

Most British Universities submit their graduating students to examination by external as well as internal evaluators. By doing this it is felt that the quality and integrity of a university's degree programme will be maintained.

Graduate Studies

The need for a vital graduate studies programme in the university was unanimously asserted. Benefits to the undergraduate programme in the terms of instructors who are well informed in the developing theories and practices within the various disciplines were cited as of primary importance. In addition, the training of researchers and professionals within disciplines are considered responsibilities that no university can avoid.

The ratio of graduate to undergraduate students varies

among universities. The average proportion of graduate students in British universities is very close to 19 percent. The University of Birmingham, however, presently has about 25% of its student body taking graduate study.

Graduate studies are almost exclusively research oriented. Very few formal courses are provided for graduate students. Rather, a student is expected to work closely with a faculty supervisor on research topics of mutual interest. The defense of his graduate thesis constitutes the major evaluation of the student's merit.

Support for graduate students varies considerably but is generally deemed to be less than what it should be. While Recommendations 24 and 25 of the Robbins Report suggested improvements in graduate support, the feeling seems to be that more effort in that direction is necessary.

The Learning Environment

The tradition among British universities has been to provide the best possible facilities and support necessary for learning to take place, and then to place much of the responsibility on the student to take advantage of the resources available.

Class sizes are relatively smaller than in corresponding undergraduate courses in North American universities. As a consequence, the ratio of faculty to students is greater than in

North America; averaging about 1:6 in the sciences and 1:10 in the humanities and social sciences.

The extensive use of academic tutors, most often members of faculty and graduate students, provides additional learning support to undergraduates. Many tutors live in student residences and, therefore, are accessible to most students. The majority of students tend to select universities at some distance from their homes and take advantage of the fine residences provided. The combination of these factors is seen to provide the British university student with a very personalized university experience.

The evaluation of students has tended to be based mainly on their performance on a series of final examinations, both written and oral, at the end of the final year of the degree programme. Information regarding progress during the earlier years can be provided informally by instructors and tutors, with remedial assistance being offered by tutors when necessary. A number of universities are beginning to adopt the North American model of "continuous assessment"; a move to counter recognized difficulties of a single terminal evaluation. As a parallel move, several universities are tending toward the implementation of some form of the course credit system that is familiar to North Americans. It should be noted that these developments are not being received with unanimous enthusiasm by all members of the university community.

The application of instructional technology such as television, audio-visual aids and computer assisted instruction is well underway in most British universities. The major computer facilities are generally accessible through telecommunication to smaller institutions in what appears to be a fine cooperative effort in the sharing of this essential and expensive resource.

Research

Research is deemed an integral part of academic life in Britain. All members of faculty are encouraged to engage in research activity, and this is reinforced by a normal teaching requirement of about six hours per week.

Most research is funded by the British government through a number of research councils. To a lesser extent industry, both private and national, supports research projects of special interest under contract.

The fine reputation for research that British universities have is a reflection of its high status within the university community.

The University of Birmingham

Special Programmes. The University has developed several institutes and centres directed toward study and research in a number of areas. The consensus within the University appears to be that this approach to interdisciplinary studies is appropriate and successful.

The Institute of Local Government Studies offers advanced courses for senior local government officers and is largely supported by the four Local Authority Associations it is designed to serve. In addition to offering an intensive ten-week course to selected local administrators, the Institute has a programme for local administrators in emerging overseas countries. It also organizes regional seminars and has a vital research programme in planning and management theory, manpower forecasting and information systems. The Institute has a widespread reputation for excellence in its field.

The Barber Institute of Fine Arts contains an excellent collection of the works of international artists. It was established by a family foundation to provide the University with a focus for studies in art history.

There are several very successful interdisciplinary centres within the Faculty of Commerce and Social Science. These include the Centre for Urban and Regional Studies, the Centre for Russian and East European Studies, the Centre of West African Studies, and the Graduate Centre for Management Studies.

University of Birmingham (cont'd.)

The Review Body Report - 1972. In January of 1971, the Council of the University appointed a "Review Body" whose task it was "To consider the role, constitution and functioning of the University of Birmingham and to make recommendations to Council for any desirable changes:". The Review Body was composed mainly of academics external to the University and was chaired by the Rt. Hon. J. Grimond, former leader of Britain's Liberal Party. An interim "Consultative Document" was distributed in January, 1972. The Report was presented to the Council on 21 September 1972.

Inasmuch as the Report is a comprehensive statement of the direction that a vital modern university should take, it is of particular interest to the present Commission. Among the extensive list of recommendations are many that bear directly on matters concerning the University of Victoria.

A copy of the Review Body Report is available in the archives of the Commission on Academic Development.

The University of Dundee

The University is situated about five city blocks from the centre of Dundee where it is growing in the midst of a decaying industrial area. As such, the University is the focal point of a major urban renewal programme in which it and the municipal council are cooperating to their mutual benefit. The University has retained a resident architect to coordinate planning and design activities of the development.

The University is expanding its Medical Faculty such that by 1977 it will be one of the largest in Britain. A very large teaching hospital is under construction to provide the clinical facilities necessary to support the expanded medical programme.

A major research programme within the University is the study of the estuary of the Tay River on which the city of Dundee is situated. The Tay is seen as the last relatively unpolluted estuary in Europe and the decision to engage in extensive interdisciplinary research in this area was based on the obvious need for such research and the advantage in location that the University holds.

The University of East Anglia

As one of the seven new universities in Britain, UEA has consciously attempted to "develop academic methods, interests and approaches significantly different from those of earlier university foundations. Both the University as a whole, and all students' academic programmes and studies, are organised around Schools, units that are considerably larger and wider in their fields of study than traditional university departments."*

This approach to university organization has permitted the development of interdisciplinary programmes in a number of areas. Among these are: Development Studies (the interdisciplinary study of developing countries), English and American Studies, European Studies, Social Studies, and Environmental Sciences. While it is somewhat early to determine the overall effectiveness of these programmes since they are still considered to be under development, the general reaction seems to be favourable.

The Environmental Sciences programme is considered among the finest offered anywhere. The School relies heavily on geography and geology to provide its disciplinary core and brings together the relevant aspects of geophysics, oceanography, meteorology, hydrology, soil science, ecology and planning. Scientific methods are drawn from mathematics, physics, chemistry, biology, sociology, economics and computing science. Student

* Prospectus for students entering in Autumn 1973. University of East Anglia, 1972.

The University of East Anglia (cont'd.)

demand for the Environmental Sciences programme is greater than can presently be accommodated. Graduates have tended to have little difficulty in obtaining employment.

The School of European Studies offers courses in the languages, history and literature of Europe. Students read at least one language (Danish, French, German, Norwegian, Russian, Swedish) during the three-year programme and must give their course either an historical or a literary emphasis. All students who study languages at the Honours level must normally spend one additional year abroad in a country where their major language is spoken. A degree in Comparative Literature is offered in cooperation with the School of English and American Studies.

The University of Leicester

The University has a strong and growing commitment to interdisciplinary studies, particularly in the biological and social sciences. Partly as a result of this, there is a new medical school under development which will accept its first students in 1975.

The University supports two notable study centres; one for Victorian studies and another for research in mass communication. The latter is the first of its kind in Europe.

The University of Stirling

If the physical environment of a university is an important factor in the quality of an institution then the University of Stirling has the setting for true excellence. The construction of the University's facilities has been under the terms of an integrated plan developed by one of Britain's leading architectural firms. While not yet complete, the development has provided Stirling with one of the world's most beautiful building complexes; several awards for excellence in design have been received by the architects.

As one of Britain's new universities Stirling has incorporated several departures from tradition into its programmes and organization. For example, while most British universities operate with an academic year of three terms, from early October through late June, Stirling functions under a semester system. The autumn semester begins about mid-September and ends just before Christmas to be followed by a seven week break. The second semester begins in early February through late May. The reaction of students and faculty to this organization has been favourable.

The University's academic structure is based entirely on departments; there are no faculties and, therefore, no deans. With very few exceptions the departments are headed by professors. This organization is designed to facilitate interdisciplinary experiences for undergraduate students during their

University of Stirling (cont'd.)

initial two or three semesters.

Stirling is one of the first British universities to incorporate "continuous assessment" procedures into its undergraduate programme. The system of assessment has three aims: to be as precise as possible in determining a student's ability to pursue a rigorous course of study; to reduce the failure rate in the final year by giving adequate early warning of failing performance; and "to discover the intellectual ability of a student, not merely how good he is at sitting and passing examinations." Approximately 40 to 50 percent of the student's final grade is based on continuous assessment.

In its efforts to establish areas of excellence, Stirling has selected psychology as one of the several disciplines into which substantial resources are being directed. By 1976 it is anticipated that the University will have the largest psychology department in Britain. The department will have the study of primates as a major research focus.

Another area of emphasis is that of Industrial Science which offers undergraduate and graduate study in the general area of "technological economics." Such topics as operations research, systems management, and decision theory are developed in the programmes of the department. This programme has been established in direct response to the needs of industry from

University of Stirling (cont'd.)

which it receives substantial support.

Stirling is the first British university to develop and apply a faculty work-load formula. The formula is based mainly on the number and type of courses offered together with the number of students taught, with no attempt to include administrative and research responsibilities. The application of the formula is seen as a viable way in which to assign teaching and tutorial responsibilities in an equitable manner. The general reaction to it seems to be positive.

The Open University

Among the many innovations in post-secondary education that have occurred during this century, none holds the potential for radical change that is embodied in the concepts underlying the British Open University. Initially the "brainchild" of the government under Harold Wilson, the OU came very close to being the victim of a change in government. However, the OU was allowed to commence operation in January of 1971 and is now a very visible part of the British educational setting.

The initial success of the OU engaged the interest of four American universities (California at San Diego, Houston, Maryland and Rutgers) to the extent that they are presently evaluating a number of OU programmes for their own applications.

The following is a review of the OU written by Diana Orton of its Information Services Department in May of 1972. It is presented here as a broad statement of the OU's philosophy and procedures.

Introduction. The Open University is a wholly new kind of institution. Established by Royal Charter on 30 May 1969 as an independent, autonomous university, it exists 'to provide education of university and professional standards for its students and to promote the educational well-being of the community generally.'

The idea of a 'University of the Air' was first

The Open University (cont'd.)

publically discussed by Mr. Harold Wilson in a speech in Glasgow in 1963. A Government White Paper "University of the Air" was published in 1966 which recommended the establishment of a Planning Committee to examine the idea in detail. The Planning Committee under the chairmanship of Sir Peter Verables, the then Vice-Chancellor of the University of Aston in Birmingham, was set up in 1967 and its report was published early in 1969. This was immediately accepted by the Government of the day.

By the autumn of 1969 the first academic and administrative staff were established at Walton Hall, the University campus some 50 miles north of London, and the detailed planning of the first courses began. Applications for places commenced in January 1970 and the lists were closed in early August of that year. In January 1971 24,000 students began to study foundation (first level) courses in arts, social sciences, mathematics or science as the first step towards the attainment of their BA degree. 1972 saw the introduction of an additional foundation course in technology together with some 20 second-level courses. Further courses at second, third and fourth levels are planned for 1973 and subsequent years. The University's postgraduate programme is also under way, and January 1973 will see the introduction of a third major activity: post-experience courses. This article will concentrate on the undergraduate programme.



The Open University (cont'd.)

The Degree Structure. The University offers the B.A. and the B.A. (Honours) degree at the undergraduate level. Degrees are awarded to students who have accumulated the requisite number of course 'credits' (see below). Six credits are required for the B.A. degree and eight for the B.A. with Honours. There are four levels of courses: foundation, 2nd, 3rd and 4th. For both degrees, two of the credits obtained must be at foundation level. The two extra credits needed for the Honours degree must be at third or fourth level. Students with certain qualifications obtained at other institutions may be awarded up to three credit exemptions, and those awarded two or three exemptions take only one foundation level course. Thus, a teacher with three years' full-time training may in fact graduate after gaining only three O.U. credits.

As mentioned above, foundation courses are offered in the faculties of Arts, Social Sciences, Mathematics, Science and Technology. Second, third and fourth level courses are provided in these faculties and in a sixth faculty, Educational Studies, which has no foundation level courses. From the second level onwards a number of courses are 'inter-disciplinary'; for example, the second level course Biological Bases of Behaviour was produced by a course team from the faculties of Science, Social Sciences and Technology.

The system enables a student to choose widely from the

The Open University (cont'd.)

different faculties, with a minimum of restrictions, or alternatively to take most of his courses in one faculty. Each course, which is produced by a course team of academic staff, BBC staff, and educational technologists, is self-contained and leads to the award of a full or a half-credit. In the Science faculty there are also one-third and one-sixth credit courses, which allows for even greater flexibility. Any one-third course may be combined with any one-sixth course to make up a half-credit: for example, at second level, Geology, a third-credit course, can be combined with Environment, a sixth-credit course. Students may take up to two full-credit courses a year, or they may spread their studies over any number of years, with intervals of any length between courses. A woman student, for instance, may wish to postpone taking the next course until after the birth of her baby.

It is a fundamental principle of the University that no formal educational requirements are needed for admission. Students must be over 21 and resident in the United Kingdom. Admission is determined primarily on a "first come, first served" basis, but a quota system operates so as to balance the intakes to each course, from each region, and sometimes for each occupational category. It follows that a teacher living in London and wishing to study social sciences is well-advised to apply early!

The Open University (cont'd.)

The Instructional System. The Open University claims that its instructional system is unique; but what is the system? The University was originally conceived as the 'University of the Air', and there are many who are still under the impression that television and radio broadcasts are the major components of the teaching 'package'. This is not so. The core of the student's learning resources is the correspondence material, which he receives regularly through the post. There are 34 or 36 study 'units' in a full-credit course, each unit representing one week's work, which is likely to take a minimum of 10 hours' study. The correspondence parts of the units go out in the form of attractively-produced printed volumes, either bound separately or in groups - depending on their length.

A typical week's booklet of, say, 48 pages (A4 size) contains a considerable amount of exposition, illustrated by diagrams, charts and pictures where necessary. To assist the student in assimilating the content, there are self-assessment exercises. There are also assignments which must be sent back either to be marked by a course tutor or are specially designed to be assessed by computer. The marks obtained in assignments are recorded and the best are used as part of the final assessment of a student's performance. (An examination is also held at the end of the year's course.)

In his correspondence package the student may also

The Open University (cont'd.)

receive supplementary pages containing remedial or enrichment material and notes about the television and radio programmes. At the beginning of their courses science and technology students are sent home experiment kits containing for example chemicals, glassware, instruments and items of equipment specially designed or developed for the University. Examples of these are the McArthur microscope (which has won two design awards this year), a colorimeter, a tachistoscope, a 'noise meter', a binary computing device, and a cathode ray oscilloscope.

Television and radio are, of course, important elements in the learning process, though in terms of the average student's time spent studying per week they represent together only a small proportion - about 10 per cent. Essentially, the television and radio programmes supplement the written part of the course. The degree of integration between the printed matter and the broadcasts varies considerable from course to course. In the science foundation course it is very close: a typical television programme, for example, might ask students to turn to a particular page in the correspondence booklet and enter readings from instruments shown on the screen. In the humanities and social science courses television provides more in the way of enrichment than essential information; the programmes are intended to deepen understanding. The use of radio programmes also varies. One of the advantages of radio is that it can be used at much shorter

The Open University (cont'd.)

notice to provide remedial advice.

In the Summer there are one-week residential schools, which all foundation course students are required to attend (higher level courses do not always have a summer school component.) Last year's experience at the summer schools showed that students were highly motivated and voracious for instruction, discussion and seminar work. Part-time tutors who were recruited from other universities said they had not enjoyed teaching so much for years! Since the Open University does not have a campus large enough to accommodate its own students, the residential schools were timed so as to take advantage of the spare capacity of other universities during the long summer vacations.

The University has 13 regional offices with responsibility for the organisation of the important tutorial and counselling services. There is a network of nearly 300 study centres throughout the country, located in existing educational institutions. Open in the evenings and at weekends, they are places where students can receive face-to-face tuition, assistance and advice from tutors and counsellors, and also meet their fellow-students. Most study centres have television and radio receivers, and in areas where BBC-2 and VHF radio cannot be received, they have film and audio-tape replay facilities, so that students can see and hear the programmes they cannot receive on the public broadcasting system. Some study centres are also equipped with computer terminals for

The Open University (cont'd.)

the use of mathematics students. Use of the study centres is entirely optional for students: the University's system is designed for home-based study.

The Student Population. For its first year of undergraduate teaching, 1971, the Open University received nearly 43,000 applications for 25,000 student places. In the event, 24,100 applicants accepted the offer of a place and began their studies in January 1971. Some 20 per cent of these were enrolled for two courses, making a total of over 28,000 student courses. To allow for easy withdrawal by those who found they had bitten off more than they could chew, payment of the final tuition fees was deferred until May. It was anticipated that the fall-out rate would be approximately 25 per cent; in fact, it was 26 per cent, and some of the fall-out was partial in the sense that some two-course students decided to drop one of their courses. By 7 May 1971 final registration fees had been received from just over 19,000 students for a total of 21,700 courses.

In November 1971 the first examinations were held. Of the 19,000 registered students, 15,800 sat the examinations, and 92.5 per cent of these were successful in gaining a credit. Over 1,600 students were awarded two credits. Thus, three out of four registered students successfully completed their first

The Open University (cont'd.)

year's study.

Application for the 1972 foundation courses totalled just over 35,000, of whom 21,000 were offered places. Applications for 1973 close on 19 June this year. Detailed analyses have been made of the 1971 and 1972 applicants, by course, region and occupation. To examine them thoroughly in the space of this article is impossible, but one or two interesting points may be mentioned. There is probably no such person as the typical OU student but, as might well be expected, there is a high proportion of teachers among the students - over a third in 1971 and nearly 30 per cent in 1972. The proportion of men to women was roughly the same for both years: approximately two to one. As far as courses are concerned, social sciences is the most popular, closely followed by arts. When the technology foundation course was introduced this year it took some support away from the mathematics and science courses.

Feedback and Evaluation. The Open University does not claim to have developed a perfect model of such a complex instructional system during the 18 months its courses have been in existence. Obviously, the experience gained in the first year was of great value in planning for the second and subsequent years, but the University is setting up a comprehensive feedback network that will enable it to use the students' experiences to modify the system.

The Open University (cont'd.)

The Planning Committee had foreseen the importance of educational technology in the Open University, and in April 1970 an Institute of Educational Technology was established. It is involved not only in course development but in institutional research. There is continuous monitoring of the effectiveness of the teaching system and of the students' behaviour within it, using some of the mass of data that accumulates each day. In the longer term, a broad plan for evaluative research has been drawn up, and a Social Science Research Council grant has been made for a study of the educational and occupational background of OU students.

Research is central to the fulfilment of the University's objectives of providing its students with the best possible learning materials and learning environment. Already the indications are that it is becoming a catalyst in the educational world. Its teaching materials - books, films, tapes, scientific equipment - are being bought by educational establishments in the UK and overseas: by April of this year course book sales alone had reached the 100,000 mark. The majority of purchasers are universities, teacher training colleges and other centres of higher education. At the same time, there is a constant stream of visitors to Walton Hall from all over the world, many of them educationists interested in the possibility of adapting Open University methods and materials to their own institutions.

The Open University (cont'd.)

As the Vice-Chancellor said in his annual report for 1970, the idea of a 'University of the Air' came to be regarded as a political gimmick. The Open University, on the other hand, is a reality, and in three years it has established itself as a viable educational institution.

Conclusion

The great respect in which the universities of Great Britain are held throughout the world has not been gained without a conscious effort to develop the finest possible educational and research programmes. It was made clear to this observer that the struggle for scholarly excellence in British universities is the essence of their academic life.

It is with the suggestion that such excellence is within the grasp of the University of Victoria that this report is respectfully submitted.

LIST OF PERSONS WITH WHOM DISCUSSIONS WERE HELDThe University of Birmingham

- H. S. Ferns, Professor & Head, Department of Political Science
- H. Harris, The Secretary
- F. H. Hilliard, Chairman, Department of Education
- K. W. Humphreys, The Librarian
- R. B. Hunter, Vice-Chancellor and Principal
- W. R. G. Lewis, The Registrar
- H. A. D. Miles, Professor & Director, The Barber Institute of Fine Arts
- P. B. Moon, Dean, Faculty of Science and Engineering
- R. J. North, Dean, Faculty of Arts
- F. C. Ott, Senior Assistant Secretary
- G. V. Raynor, The Deputy Principal
- C. P. Thompson, The Bursar

The University of Dundee

- C. Blake, Dean, Faculty of Social Sciences and Letters
- J. Drever, The Principal
- S. G. G. MacDonald, Dean, Faculty of Science
- J. Paterson, The Resident Architect
- R. N. M. Robertson, The Secretary

The University of East Anglia

- G. A. Chadwick, The Registrar and Secretary
- K. M. Clayton, Pro-Vice-Chancellor
- B. G. Clarke, Lecturer, Environmental Sciences
- N. E. Cusack, Dean, School of Mathematics and Physics
- B. A. Rowley, Dean, School of European Studies

The University of Leicester

R. L. Borthwick, Acting Dean, Faculty of Social Sciences
 J. F. Eggleston, Senior Lecturer, School of Education
 M. A. Higgins, Senior Assistant (Registry)
 J. Kemp, Dean, Faculty of Arts
 A. J. Meadows, Dean, Faculty of Science
 G. B. Pyrah, The Librarian
 P. C. Russell, Warden, Stamford Hall
 L. C. Sykes, Deputy-Vice-Chancellor

The University of Stirling

R. Ball, Lecturer, Industrial Science
 R. G. Bomont, Deputy Secretary & Accountant
 F. R. Bradbury, Head, Department of Industrial Science
 T. N. Davis, Senior Lecturer, Education
 T. B. M. Lamb, External Relations Officer
 D. Lang, The Secretary
 P. McEwen, Head, Department of Psychology
 H. Meidner, Head, Department of Biology
 I. Thomson, Director of Physical Recreation
 A. N. Walker, Estates & Buildings Officer

The Open University

J. C. Greenall, Senior Press Officer
 P. G. Holiday, Assistant to the Vice-Chancellor
 G. A. H. Kiloh, Admissions Officer
 A. T. A. Learmonth, Professor, Geography
 M. Ross, Lecturer, Institute of Educational Technology

APPENDIX D

The Academic Future of the University of Victoria:

A Committee Report, 1963

Education must be removed, so that degree programmes can overlap from one faculty into another and avoid unnecessary restriction. Honours Programmes should be even more flexible than General Programmes, though considerably more taxing, and only when they are firmly established should graduate work be started. There appear to be good prospects for graduate work of a very high calibre in certain specialized fields.

- 1.(a) The University of Victoria should develop its own programme in the Faculty of Education which would stress a vital and creative approach to teaching. To ensure the establishment of such a programme, it is recommended that a demonstration school be set up, a consolidated methods course be inaugurated, a programme of study and research be pursued and the principle of inter-faculty teaching assignments be accepted.
2. The true ends of education will not be served by crowding the academic year with extra terms, nor yet by crowding the University with nomadic hordes of students. As the University grows it should branch out into a residential college system, providing all its students with the sense of intimacy and identity they have had in the past; and it should also provide a two-year diploma course for those students who cannot or do not wish to take a degree. The present emphasis on formal lectures needs to be less insistent, and the system of counselling

In December 1962, Dr. W. H. Hickman, Principal of Victoria College, convened a special committee, subsequently known as the Principal's Study Group, and requested the members to undertake a general planning study for the future of the University of Victoria. The terms of reference were unrestricted except that finance and physical development were excluded.

During the next seven months the Committee met more than twenty-five times to discuss the future of the growing university. All faculty members were invited to submit their ideas and suggestions and a number of useful briefs were received.

The Committee consisted of the following members:-

- Dr. Howard B. Barnett, Associate Professor, College of Education.
- Dr. Gwladys V. Downes, Associate Professor of French.
- Mr. Hugh E. Farquhar, Professor, College of Education.
- Dr. Esme N. Foord, Associate Professor, Supervisor of Counselling and Testing.
- Mr. Dean W. Halliwell, Librarian.
- Dr. Alexander D. Kirk, Assistant Professor of Chemistry.
- Dr. John D. Peter, Professor of English.
- Dr. Peter L. Smith, Assistant Professor of Classics.
- Dr. Roy E. L. Watson, Associate Professor of Anthropology and Sociology.

The chief recommendations of the report were summarized as follows:-

1. The general undergraduate academic programme should be as flexible as possible, but at the same time should provide a sound 'core' of major subjects, around which optional courses can be grouped. Rigid divisions between the Faculties of Arts, Science, and

by faculty should be revised.

3. For the present, it is recommended that the standards for admission to the University remain unchanged. Honours students should not be allowed supplemental examinations, but general students in all years should be allowed one supplemental, as at present. In general, no student should be permitted to repeat a course more than once. Where the arrangement is advantageous, students should be permitted to spend their third years at another university.
4. The academic freedom of all members of faculty must be guaranteed, and security of tenure accorded to all appointees 'without term'. Research and professional creative work must be more actively encouraged than they are at present, and the system of appointments should be as enlightened as possible. Since the worth of the University will be largely determined by the quality of its faculty, every effort should be made to attract and hold the best available teachers and scholars on its staff.
5. The non-academic activities of students provide an important, if unofficial, type of education, and as far as possible they should be governed by the students themselves. The Committee strongly opposes the establishment of fraternity and sorority chapters at the University of Victoria; on the contrary, it would like to see exclusiveness discouraged, and foreign students taking a full part in university life. Student fees should be kept as low as

possible, and the system of scholarships reviewed. Athletic activities should be encouraged but not demanded.

6. The University should aim at leadership in its community, not subservience. In the Summer Session, and in the field of adult education, it should provide instruction of high academic quality, avoiding the duplication of courses already available through other agencies. Extension work should not be allowed to proliferate at the expense of the basic programmes for regular students. As far as possible, the resources of the University Library should be available to the community at large. Offers to establish special institutes on the campus, or to donate special buildings, should be accepted only if full control is to vest in the University. One member of the administration should act as an information officer, maintaining the best possible public relations with the community.

APPENDIX E

Chronological Review of Major Academic Decisions

APPENDIX E

CHRONOLOGICAL REVIEW OF MAJOR ACADEMIC DECISIONS

Stage I - Victoria College

1945. A Victoria College Council was established by agreement between the Department of Education, the University of British Columbia and the Greater Victoria Board of School Trustees. The Council assumed responsibility for academic affairs; the Board of School Trustees retained responsibility for financial matters.
- 1946 The College moved to the Normal School campus, Lansdowne and Richmond.
- 1950 A few additional acres on the west of Foul Bay Road at Lansdowne (Dunlop property) were purchased.
- 1955 A Provincial Statute designated Victoria College as a second institution of higher learning in British Columbia; affiliation with the University of British Columbia was retained. Victoria College was to be administered by a Council of eleven members representative of all institutions directly interested. (For membership see Victoria College Calendar 1959-60).
- 1956 The Victoria Normal School was absorbed by the College as part of the University of British Columbia College of Education.
- 1958
Spring The University Act was amended to provide for election by Victoria College Faculty of two representatives to the UBC Senate. (The Principal was a member ex officio and the Director of Teacher Training, Victoria College, was always one of the representatives of the Faculty of Education).
- September UBC Senate approved the offering at Victoria College of third and fourth year courses in Arts, Science and Education.
- November The opportunity to acquire National Defence property at Gordon Head occurred. The College Faculty agreed that the property should be acquired.
- Debate about the future site of the College began. A plan for the development of the Lansdowne Campus was prepared by a government architect.
- 1959
April National Defence property (120 acres) at Gordon Head was purchased.

.... 2

Major Academic Decisions - 2

1959 (cont'd)

September Faculty was informed that the College Council had reached no decision on the future site of Victoria College.

A public drive for funds of approximately 2½ million dollars was announced. The total collected was to be matched by the Provincial Government.

October Faculty, apparently with encouragement from the College Council, formally approved the development of the Lansdowne Campus as the site of the College. (At the time, the campus comprised fifty-three acres, additional property having been purchased from the Hudson's Bay Company).

November Faculty approved a list of buildings to be constructed forthwith. (It was assumed that the drive for funds would be successful).

1960

May UBC Senate approved a Victoria College programme in Astronomy - a programme not offered at UBC.

1961

March 21 Faculty was informed that Dean Wurster, School of Architecture, University of California, was to visit Victoria to study plans for expansion.

March 30 Dean Wurster and his partner, Mr. Emmonds, reported to Faculty. They urged (i) that university thinking should be in terms of a century and that, therefore, Victoria College should acquire as much land as possible, and (ii) that Victoria College should plan for an enrolment of at least 10,000. They recommended a move to the Gordon Head property.

April Faculty approved - not unanimously - the suggestion that the College move to the Gordon Head property.

May First Victoria College Convocation for the conferring of degrees was held.

December One hundred and forty-one (141) acres adjacent to the property at Gordon Head (acquired earlier from the Department of National Defense) was purchased from the Hudson's Bay Company.

1962

December The Macdonald Report recommended a system of Post-Secondary School Education as follows:

Major Academic Decisions - 3

1962 (cont'd)

- i) Institutions should be of four types:
 - a) Institutes of Technology
 - b) Two-year Regional Colleges (partly technical, partly academic)
 - c) Four-year Colleges - undergraduate work
 - d) Universities - undergraduate and graduate work
- ii) Of these, the latter two should be self-administered, i.e. be autonomous; the first two should involve the cooperation of the Provincial Government and local School Boards.
- iii) There should be an Academic Board to foster development of Colleges and to assist in the solution of academic problems.
- iv) There should be a Grants Commission to assist the Provincial Government in weighing the claims of the various institutions on the Public Purse, and to distribute grants made by the Federal Government.

(Implicit in the report was the assumption that each four-year College and, indeed, each University would not try to be all things to all people.)

1963

Feb/March

A Universities Act provided for the continuation or constitution of three separate and autonomous universities within the province.

April

The Principal of Victoria College established a Committee charged with responsibility to make recommendations with respect to the Academic Future of the University of Victoria.

.... 4

Stage II - The University of Victoria

(based on Minutes of Senate)

1963 (cont'd)

October

The Committee on Campus Planning urged the Senate to issue a statement of policy with respect to the growth and development of the University. The Chairman of Senate suggested that such a statement should await the report of the Principal's Committee, appointed some six months previously and charged with the responsibility to make recommendations with respect to the Academic Future of the University.

November

Senate received the report of the Principal's Committee on the Academic Future of the University. There was considerable discussion but no real meeting of minds with respect to the recommendations that:

- 1) rigid divisions between the Faculties should be removed;
- 2) honours programmes be well established before graduate studies introduced;
- 3) the academic areas in which special advantages are enjoyed by the University of Victoria should be the areas emphasized;
- 4) the Faculty of Education should develop its own programmes of teacher training and to this end a demonstration school should be established forthwith and inter-Faculty appointments should be made;
- 5) a College System should be established;
- 6) diploma programmes should be available to students wishing further training but not wishing to pursue a complete degree programme;
- 7) entrance standards should remain unchanged;
- 8) honours students should not be permitted to write supplemental examinations;
- 9) no student should be allowed to repeat a course more than once.

The remainder of the report was read without further discussion.

(The Report, it seems, was never considered further by Senate.)

.... 5 .

Major Academic Decisions - 5

1963 (cont'd)

December On the recommendation of its Committee on Admission Requirements, Senate resolved that Admission Standards (High School Graduation, University Programme) should remain unchanged.

Consideration of Rules for the Conduct of Senate Business and consideration of an appropriate definition of "Faculty" occupied most of the time of this and the next meeting of Senate (February 5).

1964

February The establishment of a major in Physical Education was debated.

The academic "location" of Music and Fine Arts (separate school or part of the Faculty of Education?) was debated.

May The Department of Linguistics was established and a first course approved.

A proposal for a programme in Nursing Education evoked a debate about "priorities" - professional schools before or after graduate studies.

September Concern was expressed about relative standards of summer and regular courses.

It was announced that funds accruing from current Tri-University public fund drive for \$28,000,000 would be divided 42% (UBC), 42% (Simon Fraser), and 16% (UVic).

Plans for Maison Française, (summer 1965), were announced.

October Committee on Graduate Studies and Committee on Academic Planning established.

December Establishment of a School of Fine Arts approved.

Proposal for an Anglican/Roman Catholic College discussed at length.

Some dismay expressed concerning the delay in approval of Graduate Studies.

1965

February Senate approved student membership on its Committees "whenever definite student interests are involved".

April Progress reported by Committee on College System.

School of Fine Arts approved (some concern about costs expressed).

... 6

Major Academic Decisions - 6

1965

April (cont'd)

Approval granted for circulation to Heads or Chairmen, and to the Director of Counselling of all grades awarded to students during the 1963-64 academic year.

Report on Proposed Nursing School evoked expression of concern re costs.

Proposal for an Anglican/Roman Catholic College rejected.

May

Registration at two post-secondary institutions (unless special permission was granted) prohibited.

Attention called to the possibility of a regional college in the Victoria area.

September

Report by Committee on Graduate Studies submitted to Senate.

The Chairman stated that (1) during the early development of a programme of Graduate Studies, professors would have to carry graduate instruction as an overload beyond their ordinary teaching duties, and (2) several Department Heads had assured him that graduate studies could be instituted on a small scale with nothing more than minimal cost to the University.

It was indicated that the introduction of Graduate Studies

- 1) had been approved by Joint Faculties;
- 2) unanimously approved by the Faculty of Education;
- 3) had been approved by the Faculty of Arts and Science, but not unanimously;

The proposal for Graduate Studies was referred back to the Faculty of Arts and Science.

A proposal for the institution of a Pacific Studies programme was referred to a Committee for further study.

Considerable concern was expressed about the apparent disparity in grades allocated.

October

Establishment of a Committee to administer, for five years, a programme of Graduate Studies approved. (A motion that "no development in the area of Graduate Studies be undertaken at the expense of undergraduate instruction at this University" evoked assurance from the President and the Dean of Arts and Science that undergraduate studies and the library would continue to be accorded priority over graduate studies in the allocation of university resources.)

.... 7

Major Academic Decisions - 7

1965 (cont'd)

November . Notice given by the Faculty of Education of its intent to establish, on an experimental basis, an internship programme in Education leading to a Teacher's Certificate. It would be structured as follows:

- 1) 25 or 30 older candidates (qualified to enrol in regular Education Programme) to be placed in schools during May and June, 1966.
- 2) Candidates to attend 1966 Summer Session (6 units).
- 3) Candidates appointed to schools in 1966-67 to be visited regularly by members of Faculty of Education and to attend Saturday seminars.
- 4) Candidates to attend Summer Session 1967 (6 units).

December Internship programme in Education approved to be administered by an Acting Director:

Regulations re Ph.D. programmes approved.

1966

January

Approval in principle of Fine Arts curricula. (Considerable misgivings were expressed concerning probable costs).

February

Abolition of "Science Requirement" for B.A. degree.

Announcement of establishment of three categories of "tutorial posts" for graduate students, it being understood that further financial assistance for graduate students would be provided by recruiting laboratory demonstrators from among graduate students.

Report of Senate Committee on graduate studies indicated:

- a) the criteria by which the competence of any department to offer graduate studies had been assessed;
- b) recommended that the departments of Biology, Chemistry, Geography, History, Linguistics and Physics and the Faculty of Education be granted permission to offer graduate studies at the Master's level, and that applications for admission to a Ph.D. programme in Biology, Chemistry and Physics should be considered individually by the Senate Committee on Graduate Studies.

The Senate neither approved nor disapproved the "criteria of competence", but did approve the offering of Masters' programmes in the areas indicated.

.... 8

Major Academic Decisions - 8

1966 (cont'd)

February

Major in Physical Education approved.

The approval by Joint Faculties of the institution of a "College System" was referred to Board of Governors.

Senate Committee on Fine Arts established.

Approval of graduate studies in Psychology (including Ph.D.)

April

Approval of appointment of Committee of Development to direct establishment of School of Nursing.

A Council of the School of Graduate Studies was proposed, which might communicate directly with supervisors of graduate students, thus by-passing the Chairman or Head.

Chairman of Senate reported considerable community interest in establishment of School of Social Work.

Some concern was expressed about cost of operation of the proposed Centennial Stadium.

Debate on admission of students to Senate was postponed pending receipt of the Duff-Bardahl report.

Announcement of appointment of a Director of the School of Fine Arts.

September

First Graduate School Report: 74 applications for admission - 30 full-time students; doctoral candidates in Chemistry, Biology and Psychology.

Briefs re (i) School of Social Work and (ii) School of Law filed - professional schools vs graduate school debate renewed.

November

Approval of formation of Graduate Student Society.

Establishment of School of Nursing recommended to Board of Governors.

December

Progress report re School of Social Work.

Plans re School of Nursing in state of flux because of changes in R.N. programme.

Offerings in Italian approved.

Programme in School of Fine Arts approved.

.... 9

Major Academic Decisions - .9

1967

February

Approval of 5-year programme in Elementary Education.

Degree in Art History to be a B.A.

Chairman announced that a Committee on University Government was being established. (It was to consist of 11 members, representatives of Board of Governors, Senate (non-academics), Joint Faculties, Faculty Association, Alma Mater Society).

April

Establishment of Committee to study liaison between School of Fine Arts and Victoria School of Music.

Establishment of a Committee to make recommendations with respect to improvements in the Evaluation of Teaching and Intra-Campus Communication, and of a Committee to advise concerning Campus Thinking (i.e. to advise the President concerning "current trends and modes of thought on the campus").

May

Approval of Ph.D. programme in Geography.

Approval of establishment of Faculty of Graduate Studies as of September 1.

Confirmation of the earlier recommendation that a School of Nursing be established, the programme to start forthwith.

Proposal re Pacific Studies referred to the recently established Committee on Academic Planning.

Submission of report re School of Social Work - for study.

September

Affiliation of School of Music with School of Fine Arts given tentative approval.

Concern expressed about the proliferation of course offerings, some of which were alleged to be oriented more to the interests of individual faculty members than to the requirements of students.

Chairman reported that the Faculty of Arts and Science "had resolved that it not be divided administratively at this time."

October

Establishment of School of Social Work approved (despite some misgivings).

Approval of affiliation of the Victoria School of Music with the Department of Music.

..... 10

Major Academic Decisions - 10

1967 (Cont'd)

December Approval of establishment of a Department of Bacteriology and Biochemistry.
Partition of Department of Modern Languages discussed.
Four theatre courses approved for credit towards a B.A. degree.

1968

January Institution of monthly meetings of Senate during the academic year, and at the call of the Chairman.
Departments of History and Mathematics granted permission to offer graduate work at the Master's level.
Approval of student representation on Senate.
Approval of partition of Modern Languages into four Departments.

February Renewed approval of School of Social Work.
Approval of graduate work in Theoretical Physics.
Partition of the Division of Art and Art History proposed.
Projected University enrolment in 1974 - 8,000.

March Elimination of language requirement for baccalaureate degree proposed.
Partition of Division of Art and Art History into Division of Visual Arts and Division of Art History approved.

April Campus Planning Committee reported its endorsement of the commitment made by the Board of Governors to pay 15% of construction costs of the TRIUMF project.
Difficulty in finding a suitable director of the School of Nursing reported.
Proposal made that meetings of Senate be open.

May (two meetings) Debate about development of a Drama Programme evoked discussion about "priority" decisions with respect to "desirable developments."
Pacific Rim Studies programme resurrected.
Academic Planning Committee requested to canvass campus opinion re compulsory courses.
Campus Planning Committee reported urgent need for more space for the natural sciences.

.... 11

Major Academic Decisions - 11

1968

May (cont'd)

A total University enrolment of 10,000 in 1975 predicted.

Formal affiliation of Victoria School of Music (henceforth to be known as the Victoria Conservatory of Music) with the University approved.

Ph.D. programme in Educational Psychology approved.

Announcement of postponement of establishment of School of Nursing.

Erickson-Massey preliminary report on Master Plan for the campus presented.

Tribute paid to retiring President Taylor.

Proposal for immediate provision of two more science buildings (60,000 square feet each).

Annual capital needs during the next 6 to 7 years estimated at \$2,000,000.

July

Professorship in Military History approved (financed by Department of National Defence and involving the offering of seminars at Calgary and UBC).

September

Chairman requested to set up Committee - representative of Board of Governors, Faculty Association, Alma Mater Society and Graduate Students - to prepare brief to be submitted to the Provincial Commission on Relations between Universities and the Government (The Perry Commission).

Committee on University Government reported establishment of two Sub-Committees, one concerned with administration at the department and faculty levels, and the other concerned with policy-making, and policy-making institutions, particularly the Senate and the Board of Governors.

Announcement of appointment of architects for the Chemistry and Physical Education Buildings.

October

Problem of liaison between four committees concerned with physical facilities discussed (Academic Planning, Campus Planning, Physical Plant Committee (Board of Governors) and Users').

Plans for Biology Building approved.

Approval of graduate programmes in Anthropology and Sociology.

.... 12

Major Academic Decisions - 12

1968 (cont'd)

November

Lack of information about the activities and purpose of the Perry Committee was deplored and UVic administration urged to make a submission.

(Rumours of likelihood of establishment of Board of Regents to "supervise" activities of all post-secondary education was noted).

Need for long term planning noted and desirability of a "planning office" suggested.

"Opening" of Senate meetings approved.

Graduate programmes in School of Fine Arts approved.

Proposal to establish a Faculty of Fine Arts.

December

First "open" meeting of Senate.

Academic Planning Committee suggested that each first year student be assigned a faculty advisor.

Announcement that a submission to the Perry Commission had been made.

Concern expressed about certain "student evaluation" procedures.

Approval of recommendation that the Board of Governors provide, on Sinclair Road, a residence for the President of the University.

Forecast of enrolment:

	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>
	6,447	7,071	7,717

These predictions did not take into consideration the establishment of the two-year colleges.

1969

January

Approval by Senate of establishment of a Law School.

Campus Planning Committee set the following "target" dates:

Chemistry Building - 1970

Humanities Building - 1971

Physical Education Complex - shortly thereafter

.... 13

Major Academic Decisions - 13

1969 (cont'd)

February Proposal for Pacific Studies Programme renewed and approved.

Establishment of a Faculty of Fine Arts, with two departments, approved.

Phasing-out of 4-year programme in Elementary Education (5-year programme initiated two years earlier) confirmed.

Senate gave approval for the establishment of a School of Social Work - to be in operation during the next academic year.

Concern about the overwhelming number of requested calendar changes expressed by the Dean of Arts and Science.

March

The role, if any, to be played by a Department Head/Chairman with respect to "student evaluations" made by a member of his department was debated.

UBC's decision to give admission priority to students with higher average high school grades noted.

UVic facilities reported as adequate for enrolment of 5,200.

Multiplicity of courses at third and fourth year levels queried.

Senate Articulation Committee - to collate and assess reports and recommendations to come before Senate - mooted.

April 9

Long debate on implications of decisions of mainland universities to give priority to applicants for admission with B- or better grade averages.

Agreement reached on formula - based on average grade and place of residence - for restricting admission to UVic (should restrictions become necessary).

Long debate on suggestion that a student ombudsman be appointed. (Ultimately it was more or less agreed that existing facilities for dealing with students' problems were adequate).

Flexible arrangements providing for student participation in departmental decision-making were approved.

April 15

Announcement that tenders had been called for Phase I of the Biology Building.

Further debate re student representation on University Committees.

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Major Academic Decisions - 14

1969

April (cont'd)

Announcement of preliminary planning of housing for married students.

Proposal for addition of another floor to laboratory wing of the Elliott Building, the additional space to be taken over, ultimately, by Astronomy.

May

Approval of graduate studies (M.A. and Ph.D. levels), in Department of English.

Acceptance of principle of 5-year appointments for Deans, all of whom were to be appointed on advice of a Selection Committee; Associate Deans to be selected in same way for terms not coincident with that of the Dean.

Approval of establishment of a College Council - to be headed by Dean of Colleges, with representatives of the Board of Governors, of the Faculty, and of the students.

June

Provision of acceptance of credits for introductory courses in Economics, Geography and Psychology completed at Camosun College (courses had been worked out with UVic).

Optimism expressed about the provision of needed physical facilities (Biology - Phase I, Humanities Building, Classroom and Office Building, Fine Arts).

Acceptance of principle of maximum freedom of course choices for students.

Graduate work still being carried as additional load by professors.

September

Approval of granting degree of Doctor of Science to H.R.H. the Duke of Edinburgh.

Committees on Social Welfare, Law, Nursing, Pacific Studies, Administrative Studies to be reactivated with a view to assessment of need, cost, etc., with respect to programmes in these areas.

Purchase of Bamfield Cable Station announced, costs (\$85,000) being shared by five universities.

Board of Governors agreed to continue support of Victoria Fair for another year.

Announcement that all available capital funds had been committed - none available for classroom and office block which had gone to tender.

Beginning of attempt to articulate the work of the numerous

Major Academic Decisions - 15

1969

September
(cont'd)

Senate committees, the initial step being the preparation by each committee Chairman of his understanding of the terms of reference of his committee.

Preliminary report submitted by the Articulation Committee, established in March, and charged with the task of surveying the status of a host of recommendations made by Senate. (Long debate on terms of reference of the Committee).

Discussion of practices and procedures with respect to evaluation of student performance, the evaluation process being seen as an instrument "to further teaching and learning."

Disapproval of practice of "grading on a curve" expressed.

October

Proposal for the introduction of a pass/fail option, at the option of the student. A Study Committee was struck.

Proposal for revision of regulations re the General Programme, with the only restriction to be that 21 units must be at 300 or higher level, referred to the Faculty of Arts and Science.

Ideas for Experimental Programmes to be sought.

Long debates on (i) election of students to Senate;
(ii) membership in Convocation; and
(iii) problem of student appeals.

November

Concern expressed over high proportion of "re-reads" that were allocated higher grades.

Approval given for establishment of Committee on Teaching Effectiveness.

Internship programme in Education opened to recent graduates and those in the fifth year of the B.Ed. Programmes.

Articulation Committee reported that it had before it some 85 Senate recommendations.

Announcement of "quotas" for enrolment in graduate programmes, 1970-71.

December

The Dean of Graduate Studies reported that a survey indicated that Departments believed they could accommodate some 75 additional graduate students without the allocation of additional resources (space, faculty, staff, budget).

Curriculum Committee recommended establishment of the practice of granting inter-faculty credits on an individual basis.

Pass/fail system urged.

.... 16

Major Academic Decisions - '16

1969

December
(cont'd)

The October proposals re revision of regulations with respect to the General Programme were rejected.

First year English requirement abolished, with the provision that those failing a proficiency test be required to take a course in English composition.

Establishment of Library Collections in departments approved.

Graduate work in Nutritional Biochemistry approved, assurance being given that no additional resources were required.

Standing Committee on Appeals established.

1970

January

Institution in Faculty of Education of diploma programmes in Administration and Counselling (on a pass/fail basis).

Queries made about the proliferation of courses being offered.

Long debate on the B.Ed. Elementary Programme.

Department of Art History re-named History in Art.

Graduate courses in Biochemistry approved.

Discussion of relative rights of those with degrees from other Faculties seeking admission to the professional year in Education.

February

Approval of the "general" courses Chemistry 300 and 400, and Liberal Arts 305.

March

(two
meetings)

Senate resolved that lists of marks submitted to Registrar must be signed by the Department Head or Chairman, the signature certifying that the evaluation techniques used conform to University regulations and Departmental policy.

Long discussion re regulations with respect to use of Library Periodicals.

Denial of request that the Greater Victoria Board of School Trustees be granted representation on Senate.

Approval of Graduate Studies in Economics, Philosophy, History in Art, and Classics.

Admission priorities for the professional year of the Faculty of Education were established.

April

Announcement that the Faculty of Arts and Science had resolved that Faculty meetings be closed.

Official recognition of evidence that the general public is becoming disillusioned with universities.

.... 17

Major Academic Decisions - 17

1970 (cont'd)

- May Senate recognized the fact that practices with respect to student involvement in departmental meetings were anything but uniform.
- September Problem of criteria for the eligibility of part-time students for Senate membership was discussed.
Levelling-off of enrolment reported.

1971

- January Senate endorsed the recommendation of its Committee on the Pass/Fail System that the proposal (see October 1969) not be approved.
Proposal to admit to Summer Session students who, in June, completed Grade XII with high standing.
Debate was continued on the criteria for the eligibility of part-time graduate students to serve on Senate.
- March Department of Visual Arts re-named Department of Studio Visual Arts.
Graduate Studies in Political Science approved.
- April The role of Senate with respect to non-credit courses offered by Continuing Education was debated.
- June Approval for additional or re-named "general" courses was given.
- September Concern was expressed about the evaluation of student achievement.
Committee on Entrance Requirements and Standards was requested to prepare an analysis of grades allocated and of assessment procedures used.
Diploma Course in French approved (Continuing Education).
- November Termination of internship programme in Education announced.
Provision for directed studies during May and June discussed.
- December Large number of new courses proposed.
Announcement of the intention of the incoming President to appoint a task force to examine and make recommendations with respect to (1) University Goals and (2) University Governance.

Major Academic Decisions - 18

1972

- January Senate ruled that all students must pass a qualifying examination in the use of English or complete satisfactorily a prescribed course in First Year English.
- February Appointment of Vice-President (Academic) announced.
- March Retention of a quota system for sabbatical leaves announced.
Announcement of establishment of a Task Force on the Future Place of the Colleges in the University Community.
Committee appointed to nominate candidates for the position of Dean of Fine Arts.
- April Approval given for the offering of courses in Literature in Translation (French, German, Spanish).
Standing Committee on Teaching and Learning approved.
Concern about student assessment techniques again expressed.
- May A proposal that History in Art become part of the Faculty of Arts and Science was referred to the Faculties.
Proposal re Child Care Programme referred to Academic Commission.
- September Dissolution of the College System recommended to the Board of Governors.

* * * *

APPENDIX F

Student Questionnaire

COMMISSION ON ACADEMIC DEVELOPMENT
STUDENT QUESTIONNAIRE RESULTS

(Approximately 300 forms tabulated)

April 1972

"G" Hut

The Commission seeks constructive thought and suggestions from every quarter. With the help of the Alma Mater Society, this sheet will have the widest possible distribution and will offer every student a means of communicating with us. For some of you this questionnaire will suffice, but the Commission earnestly hopes that others will either pass on further ideas to their student representatives, RA members, or AMS officers, or will themselves come to talk with a member of the Commission. We are grateful for your assistance, whichever avenue you choose to communicate with us. Please remember: we are concerned only with development of the academic program and things related to it.

1. What in your opinion are the greatest academic strengths of this university at this time?
2. What in your opinion are its major academic weaknesses?
3. Irrespective of your major field of academic interest, what department have you found to be particularly successful from your own point of view?
4. ...and particularly unsuccessful from your own point of view? In that case, why?
5. Why would you or wouldn't you urge another family-member or neighbor to attend this university?
6. What three additional academic programmes (in order of importance) would you like to see added to those now offered?
7. What three academic programmes (ranked in order) would you like to see deleted?
8. Lower university enrolment often affords closer contact with faculty and intimacy in the university, but a larger university usually achieves broader programs and improved facilities. In what size university do you think you could probably achieve best your academic goals? (Please underline or circle one).

3500 5000 8000 10,000 15,000 20,000

9. Apart from formal academic courses for credit, which services offered by the university are the more valuable to you? (For example, intramural athletics, specific clubs, varsity sports events, residential college activities, film showings, concerts, theatre, public lectures, et al.) Please list not more than five and be as specific as you like.

10. Would a specific interdisciplinary programme and/or degree be of special interest to you, and if so what?

11. For bachelors' programmes, would you prefer to be at UVic, SFU, or UBC, and why?

12. Do you hope to work toward a master's or doctoral degree eventually and, if so, probably in what field?

13. How well does the residential college system work in your opinion?

14. Since this fact must obviously influence your response to some of these questions, please circle or underline the category below best defining where your home is:

Greater Victoria Vancouver Island Mainland B.C. Other province Foreign

Please use the remaining space for further comments.



SUMMARY OF RESULTS

ACADEMIC DEVELOPMENT COMMISSION - STUDENT QUESTIONNAIRE

1. What in your opinion are the greatest academic strengths of this University at this time?

The preponderant view was that small size, small classes, and availability and interest of, mainly, excellent professors are the chief strengths.

Typical Responses

The Education Faculty seems to be quite a good one.

The Psychology Department which is one of the few areas of campus where freedom allows initiative.

None (expressed by a substantial number).

The library (expressed by a substantial number):

Very few right now. General lack of interest from professors. Inability on their part of accepting another's opinion.

Diversity of subjects available to the student.

Those students genuinely interested in education themselves and those professors that nurture this interest. A possibility to help people to develop their own minds.

There is remarkable intimacy between professors and students in most departments.

The teaching staff who have made contributions to their specific areas of study, i.e. research, periodical articles, books, etc.

Its' (Sic) size, the amount of academic material available.

Certain untenured along with certain tenured professors who have not lost the ability to teach.

Good professors, some having international reputations.

The firing of Bruce Partridge and proposed revision of tenure document.

There aren't many, but its main asset is its small, workable size.

Young faculty with much potential.

The term "strength" implies mediocrity in other fields. I feel the university as a whole is sound, though nothing outstanding inspires me.

Physical Education Department:

Relative freedom of course choice.

International faculty.

Classical approach to disciplines, open stacks in library, good library.

The cultural offerings through the Fine Arts Faculty. It has a wide base of courses which can be taken but requirements for graduation with a degree are too strict.

The individual initiative program in psychology; this questionnaire if it is not window dressing.

Ability to enter a personal relationship with faculty members.

Nice intellectual atmosphere due to small size.

The library is probably the greatest strength. The librarians give most valuable assistance.

Good library book to student ratio; good student to professor ratio.

Psychology, music, and mathematics would appear to be above average.

History in Art.

I like the university as a whole, in fact I think it's fantastic. I have an easy time studying here, meeting the professors, and find everything very good.

It would seem that the sciences are the strength of this university.
Fine Arts (no kidding).

Obviously, the science departments have much to commend them--i.e. programmes, staff, and equipment, but the greatest academic strengths staff-wise are the large number of British professors who are most often the best trained and make the best professors.

High standard of professors, but we should advertise more. Eastern Canada doesn't know that UVic exists.

Music department (expressed by a substantial number).

Science faculty (expressed by a substantial number).

2. What in your opinion are its major academic weaknesses? (

Those more often mentioned:

Standards too low	31
Professors, failures of	24
Education Faculty	18
Lack of administration-student communication	18
Facilities too limited	12
Lack of administration-faculty communication	11
Tenure system	10
Student apathy	9
Small university size	9
Relevance	8

Other Responses:

Attempts to channel 1st & 2nd year students too soon to honours programs

Astronomy

Anthropology

Coordination of lectures & labs

Canadian content

Curriculum, lack of student choice

Equipment: audio visual dept., lab equipment

Economics

Exam policies

Fine Arts

Fine Arts: general interest in

Graduate studies

Hiring practices

History

Languages, more needed

Lecturing poor

Library regulations

Library poor generally

liberal arts: more needed

Seminars: more needed

Music

More music so non-majors can take

Petty faculty squabbles

Mathematics

Memorization vs learning

Pedestrianism

Philosophy

Psychology

Physical Education

Political pressure from faculty

Social Sciences

Science Departments "never heard from"

Standards, variety from course to course

Teaching: lack of importance attached to

Theatre

Visual Arts

U.S. professors

Wasted time, hence suggest 3-semester year

Too many prerequisites for "good courses"

"too many subjects and too little time for each"

Board of Governors
 Beaurancrazy, beaurancrazy! (sic)
 Budgetary limitations
 Business Administration needed
 Chemistry
 Commerce, more needed
 Conformity
 Funds for Fine Arts
 Foreign languages
 Graduate studies: for total deletion
 Geography
 Education forcing teachers into mold
 Languages, foreign
 Library space shortage
 Library discriminates against faculty
 Library discriminates against students
 Academic guide book needed every year
 Majors too "closed" to other interests

Philosophy, Psychology, Sociology,
 are Mickey Mouse courses
 Overcrowded labs and classes
 Music not enough space
 Preoccupation with marks & exams
 Physics
 Political Science
 Physics laboratory facilities
 Political Science faculty's poor
 personal standards
 Areas for study seriously lacking
 Statistics, course requires too much
 Political Clubs, interference with
 work
 Research at cost of teaching
 Sciences generally
 Summer Session offerings
 Social Work: no school of

3. Irrespective of your major field of academic interest, what department have you found to be particularly successful from your own point of view?
4. . . . and particularly unsuccessful from your own point of view? In that case, why?

Successful

Psychology 37
 Biology 34
 English 22
 Geography 20
 History 17
 Economics 16

Unsuccessful

English 39
 Education 33
 Sociology 17
 Philosophy 17

Alphabetically:

Successful

Unsuccessful

Anthropology	7	6
Audio-Visual		2
Biology	34	4
Chemistry	13	6
Classics	12	
Creative writing	1	2
Economics	16	2
Education	7	33
Educ. Psychology & counselling	5	
English	22	39
Fine Arts	4	12 (6 for lack of facilities)
French	5	13
Geography	20	6
German	2	1
History	17	8
History in Art	7	3

ADC -- STUDENT QUESTIONNAIRE

	Successful	Unsuccessful
Liberal Arts	1	
Library	1	1
Linguistics	6	4
Mathematics	17	13
Music	8	2
Oceanography	1	
Oriental & Slavic		2 (both for lack of staff)
Philosophy	7	17
Physics	3	5
Physical Education	3	6
Political Science	9	8
Psychology	37	9
Sciences in general	7	1
Sociology	6	17
Spanish	2	5
Theatre	5	5
Visual Arts		4

In answer to No. 4, the "whys" seem too personal and/or diverse to be collated or interpreted.

5. Why would you or wouldn't you urge another family member or neighbor to attend this university?

A selected 13% of the responses. The other responses were essentially similar to one of these.

- 1) No, because the excessive conservatism of the administration restricts the academic capabilities. There also seems to be too great a pressure, on both students and faculty, to make a name for the university.
- 2) You're not taught what you think you're going to learn. Profs usually don't follow course outlines.
- 3) This university community has tremendous potential, as most people recognize. The only reason I have against urging someone to attend here is the continual turmoil in administrative levels. This university is still too conservative in its approach to student representation on university committees and academic planning groups. But I would urge anyone to come to UVic because of the atmosphere, facilities, and quality of academic potential.
- 4) Assuming one knows what he wants from university, he or she can extract it from the people here with a minimum of red tape. All you really need is a library.
- 5) Too much internal tension, too little outside cooperation with other schools, etc.
- 6) Yes, I would. Have encouraged a sister who will be attending next year.
- 7) I would urge an acquaintance to go to another university after 1st or 2nd year because of the wider academic choice and more social activities.
- 8) I would encourage a person to attend this university because, if it

ADC - STUDENT QUESTIONNAIRE

has its problems' (i.e. student apathy), it has a lot to offer and because it is small, a student doesn't feel lost in a "machine."

- 9) O.K. for undergrad, but no real effort required and difficult to get into a "good" university upon graduation.
- 10) I would urge a friend or family member to attend any university, and in particular this one because of its favorable size and general appeal. You can actually talk to some of our professors.
- 11) Wouldn't, because the University is falling apart. There will definitely be long-range repercussions of the administrative members quitting. (Why would they quit if all was "well"?)
- 12) I would not encourage anyone who was interested in job-training, which the majority of young people are.
- 13) This University is a degree-mill, and so long as it has rigid courses, exams, units, and degrees awarded for accumulated units, it will remain so.
- 14) No, I wouldn't urge one way or the other. I'd just tell him how I've enjoyed it here from my own point of view.
- 15) I would not as I feel that overall it is academically weak. The institution seems to exist for the professors and not the students.
- 16) U. Vic has a pleasant atmosphere for learning.
- 17) Would not urge a person to come to the visual arts department until it is properly organized with a responsible staff.
- 18) Why of course!!
- 19) Too much tenure pressure and problems, firing of staff, resigning of staff, courses having to be taken for no credits.
- 20) Yes, because it is small, comfortable, has real people, enjoys a temperature climate, and above all has an uninhibited academic character for those who care to exercise this right.
- 21) I wouldn't - because there is so little for the mind here - no real excitement - professors are dead to students' ideas - too conservative.
- 22) Would, as it is small enough to remember you are an individual, but wouldn't, as being so small you get stuck time and again with the same poor professors for lack of faculty.
- 23) Until the administration stops being so damned self-centered, I wouldn't recommend this place to a dog! The student should come first and his education shouldn't suffer from hassles in the administration.

ADC - Student Questionnaire

- 24) Simply because of economics, I'd advise my brother to come here because he lives in Victoria, besides, Vancouver is a hole! . . . In the end, it really doesn't matter, a student is a nigger no matter where he is.
- 25) I would like to recommend it because it's smaller and more personal than, say, U.B.C. Regrettably this is fast changing. I would like to see this University not grow larger in student population.
- 26) Yes, for congeniality, conservative influence. No, for lack of facilities and narrow course scope.
- 27) Small, is easier to have personal contact with professors. Good library. Easier to get to know people.
- 28) Lack of any feeling of "university community" - kids appear to feel lost and purposeless - this has nothing to do with size but with structure.
- 29) I wouldn't have them suffer through years of unwarranted pressure and personal sacrifices for the sake of giving some professor a job - which in the long run will do little for them in life anyway apart from creating such a negative attitude as my own. I won't even give one red cent to the alumnae society.
- 30) No, I would urge them to a more settled and earnest university, one that they could study at conscientiously without flare-ups from student "governments."
- 31) Because I don't feel it is worth-while. A university education is good if you are going to benefit from it as well as the community. I don't see how society benefits from this university.
- 32) As opposed to U.B.C. or S.F.U.? U. Vic is the best choice, for U.B.C. is too big and impersonal, where S.F.U. has a lousy reputation. (U.Vic. is getting one, too, for that matter.)
- 33) Theater and studio visual departments have gone from being amongst the best in the university, (and Canada) when I came, to among the worst.
- 34) I would urge another to attend this university because I feel it is young, and needs people to help it grow and people who are willing to do their best and not try to destroy the university.
- 35) I would recommend any "qualified" and keen person to go. University has taught me not what I do know but what I don't know. Our lives are often lived in small worlds but the world of knowledge is immense, terrifying and exciting.
- 36) Good - personal interest in and attention to students is widely evident, faculty are available to students in all faculties in my experience, except Faculty of Education.

ADC - Student Questionnaire

- 37) I would recommend to most undergraduates, but I would ask them first if they really thought they would benefit from university - there are too many people here who should be obtaining a more practical education.
 - 38) The academic atmosphere outside of classrooms is stifling. There is very little doing on campus besides classes and library work. We need facilities for socializing somewhere other than the Sub Pub (which is hopeless).
 - 39) Of the three B.C. universities, I would have to recommend this one. However, I also believe the educational quality here is going down - and will continue to go down for a few years yet. The size is the best of the three - to acceptable levels of professor-student interaction. But the problems which are now surfacing will probably continue to plague the campus - the worst of it is the most problems are administrative, not academic.
 - 40) I would because I have generally enjoyed a relatively good experience here academically over the last four years. I would however warn them to select their professors rather carefully.
6. What three additional academic programs (in order of importance) would you like to see added to those now offered?

Most common suggestions

Law School	57
Medical school	32
Social work/welfare program	24
Commerce	23
Business Administration/Management	16

Others

Engineering	15
Ecology & Environment studies	13
Nursing	13
Physical Education Major	11
Home Economics	10
Canadian studies/Canadian lit.	8
Don't need more	7
Indian Studies	7
Architecture	7
Journalism	6
Fine Arts expanded	6
Photography	6
Urban Studies	5

A few votes each

Audiology	Blacksmithing	Scandinavian Lang. & Lit.
Archaeology	Computer science	Self defense (with police)
Bronze casting	Crew	Pollution, civil rights,
Criminology	Communications	and other social problems

ADC - Student Questionnaire

8.

- | | | |
|---------------------------------|---|--|
| Ceramics | Comparative literature | Teaching certificate for pre-school (1 yr program) |
| Community planning | Creative writing | Wild Life Management |
| Counseling | Equestrian | Women's Studies |
| Economics expanded | Geology | Resource Management |
| Education expanded | Industrial education | Sex education |
| Human Relations | Library Science | Science for non-scientists |
| Mathematical Philosophy | Neurologics | Theatre expanded |
| Oceanography & Marine Biology | Music expanded | TV studies |
| Astronomy expanded | Oriental studies | Zen |
| Astrology | Peace studies | Astrophysics |
| Applied science | Pharmacy | Agriculture |
| Ancient history degree | Psychic research | Animal behavior |
| Art appreciation for non majors | Psychohistory | Child care |
| B.C. history & social studies | Public Affairs | Dentistry |
| Metallurgy | Science of Creative Intelligence | General semantics |
| Punjabi | Mythology | Metaphysics |
| Natural History | Medieval studies | Optics & Optometry |
| | Physiology | Occult studies |
| | Spanish linguistics like Dr. Vinay's French | |

7: What three academic programs (ranked in order) would you like to see deleted?

Don't delete any 39
 Don't know 14

Education	24	Economics	3
Philosophy	20	Graduate programs	3
Audio Visual Department	11	Music	3
Sociology	11	Political Science	3
English	9	Law(!)	2
Theatre	8	Linguistics	2
Physical Education	7	Mathematics	2
Psychology	7	Astronomy	1
Fine Arts	7	Biology	1
Anthropology	6	Creative writing	1
Physics	6	English M.A.	1
Visual Arts	6	Fine Arts, but save Music	1
Chemistry	5	Not Fine Arts, as is now being done	1
Classics	5	Languages but not French	1
Geography	5	Russian	1
Education professional year	4	Sciences	1
History	4	Spanish	1
		Slavic Languages	1

ADC - Student Questionnaire.

8. Lower university enrolment often affords closer contact with faculty and intimacy in the university, but a larger university usually achieves broader programs and improved facilities. In what size university do you think you could probably achieve best your academic goals? (Please underline, or circle one.) Choice offered of 3500, 5000, 8000, 10,000, 15,000 or 20,000.

Of 265 total responses:

Student population of 3,500 preferred by	31
" " 5,000	66
" " 8,000	75
" " 10,000	57
" " 15,000	6
" " 20,000	15

Balance favored student population in the range from 2,000 to 30,000.

9. Apart from formal academic courses for credit, which services offered by the university are the more valuable to you? (For example, intramural athletics, specific clubs, varsity sports events, residential college activities, film showings, concerts, theatre, public lectures, et al.) Please list not more than five and be as specific as you like.

Film showings	128
Lectures: public, noted figures	119
Concerts: noontime and unspecified	91
All clubs (total)	64
Theatre	59
Athletics, varsity and intramural	40
Sub Pub	38
Clubs in general	31
Gym: exercise, informal teams	25
Dances: at colleges or in sub	22
Residential college activities	20
Outdoor Club	8
Library	8
Foreign students' presence	7
anti-Martlet	5
pro-Martlet	5
Health Service	4

Specific comments:

Phoenix Theatre should be more active.

AMS clubs represent most valid expenditure of students' money.

Coffee shops and pubs where a great deal of knowledge is imparted through informal discussion--present facilities inadequate.

Concerts: very, very fine. Five stars (*****) to Music Department.

They're free and quality of performance is exceptional. Student groups particularly exciting.

Further votes:

Library	8	Biology club	2
Poetry readings	5	Workshops in general	2
Diving club	5	Birth control, women's rights, abortion	2
Record library	4	Art exhibits	1
Bookstore	4	Fencing club	1
Counselling	3	Political club	1
Ski club	3	French club	1
Sailing club	3	Liberal club	1
Craft fairs	3	English club	1
Computer	2	Judo & karate	1
Loan office	2	Photo club	1
Dept. colloquia	2	Medieval club	1
Student government	2		
Badminton	2		

10. Would a specific inter-disciplinary course be of special interest to you? If so, what?

Liberal Arts & Science	8	Communications	1
Man & his Environment	7	Computer Science	1
Canadian studies programme & degree	6	Counselling	1
Economics, Political Science, Philosophy	6	Creative Writing	1
University degree	5	Ecology	1
Arts, general	4	Ecology for nonscientists	1
Law	4	Electronics	1
Pacific Rim	4	English as psycho-historical survey	1
Social Psychology	4	Geology	1
Urban studies	4	Journalism	1
Biology, & Anthropology, or Geography	4	Language in general	1
Fine Arts, general	3	Language, history, arts of special country	1
Social Welfare	3	Law & Business	1
Social Sciences	3	Library Science	1
No degrees in general	3	Mathematics & Economics	1
Animal behaviour	2	Medieval studies	1
Commerce & Economics	2	Music & Theology	1
Mathematics & Philosophy	2	Peace studies	1
Mathematics & Physics	2	Pharmacy	1
Music & History	2	pre-Medicine	1
Oceanography-Geography	2	pre-Theology	1
Resource Management	2	Psychology & Education	1
Science general	2	Psychology (Clinical)	1
Ancient History, (history, language, archeology)	1	Physiotherapy	1
Architecture-geodesic	1	Poetry, degree in	1
Astronomy & History	1	Recreational Geography	1
Astronomy & Physics	1	Romance Language	1
Biology and Psychology	1	Sociology & Anthropology	1
		Theatre & Literature	1
		Self study	1

ADC - Student Questionnaire

11. For bachelors' programmes would you prefer to be at UVic, UBC, or SFU, and why?

No comment, just preference specified: UVic - 32; UBC - 3; SFU - 3.

Reason for choice

<u>UVic</u>		<u>UBC</u>		<u>SFU</u>	
Size	66	Depth & breadth	20	Education	6
Live here, costs lower	25	Reputation worth more	20	Semester system	6
Location	23	Too big	11	Stimulation of	2
Friendliness	21	Dislike Vancouver	10	Chemistry	1
Faculty	18	Size	6	Film Courses	1
General potential great	10	Library better	4	Get through faster	1
Traditional values	5	Engineering	3	Location	1
Weather	5	Fine Arts	2	More money from government	1
Education	4	Exposure to Grad Work	2	More liberal	1
Biology	3	Location	2	Sports	1
Mathematics	3	Sciences better	2	Track department	1
Slower pace	3	Arts & Science	1		
Astronomy	2	Better organized	1		
English	2	Don't like UBC	1		
Music instruction, not facilities	2	Impersonal	1		
Cohesive	1	Music facilities better	1		
Economics	1				
anti-Uvic faculty	1				
History in art	1				
Linguistics	1				
Standards	1				
Specific programs	1				
Structure of year	1				
Too small	1				
Two years, then transfer	1				

Choice unimportant for bachelor's degree - 6

12. Do you hope to work toward a master's or doctoral degree eventually and, if so, probably in what field?

Don't know or no answer	81
No	57
Yes, master's or degree unspecified	146
Yes, doctorate	19

ADC.- Student QuestionnaireFields (in some cases; 'either-or')

Animal Behaviour	1	Linguistics	2
Anthropology	4	Medicine	4
Archaeology	3	Mathematics	5
Architectural design	1	Medieval studies	2
Astronomy	3	Marketing	1
Biology	6	Music	4
Biology, marine	2	Oceanography	2
Biochemistry	1	Philosophy	2
Business administration	6	Physical Education	5
Canadian Studies	4	Psychology	11
Classics	1	Physics	3
Computer Science	3	Physiology	1
Counseling, guidance	3	Psychophysics	1
Criminology	1	Resource Management	3
English	11	Political Science	7
Economics	8	Romance Languages	2
Geography	9	Sociology	5
Fine Arts	1	Social Welfare Work	8
French	1	Social & literary hist.	2
History	15	Theatre	2
History in Art	2	Theology	2
Liberal Arts	1	Urban Studies	2
Library Science	2	Visual Arts	1
Law	10	Veterinary medicine	1

ADC - Student Questionnaire

13. How well does the residential college system work in your opinion?

Many "Don't know," "What is it?", "Fine for residents," and general excellent to awful comments. Food cited as special complaint.

Positive (random sampling):

Social activities very worthwhile.
 Terribly well; it offsets AMS.
 Films and dances good.
 Very well and very important.
 A move in the right direction.
 Great dances!
 Works very well in summer, but in winter students are treated
 as small children, e.g. visiting hours
 Does promote university "esprit," which is badly needed.

Negative (random sampling):

Disappointing.
 Not very. Seems to be founded on outmoded, puritanical ideals, which
 leads to childish behaviour. Boy-Scout and girl-scout idea.
 Does it really do anything for a university this small?
 Doesn't work because of non-involvement of non-resident students.
 Not at all. Cheap imitation or sororities and fraternities.
 Lousy. Because of noise, lousy food, peer group, pressure, excessive
 sexual behaviourism.
 There is no system and it doesn't work. The whole idea is a farce
 and waste of money. Good for 1st year students.
 Not at all for non-residents. Their events and SUB's conflict,
 SUB's better.
 Isolates residents from rest of campus.
 It doesn't at UVic, but residential system is the best if properly
 funded. Too much college vs. AMS.
 As an apartment block for immature students, it's not too bad.
 Lousy, because professors should be affiliated with them.
 Not enough colleges to make system work.
 Costs too much.
 Hard for non-resident member to break in.
 Too cliquy.
 Married students' residence badly needed.
 Should be run more as an apartment building.

14. Since this fact must obviously influence your response to some of these questions, please circle or underline the category below best defining where your home is:

Greater Victoria	135
Vancouver Island	50
Mainland B.C.	35
Other Province	19
Foreign	10

APPENDIX G

An Interim Report of the
Committee on Entrance Requirements &
Standards of the University

STUDIES ON GRADING PRACTICES - SEPTEMBER 1972

(An Interim Report of the Committee on Entrance Requirements and Standards of the University)

EXPLANATION OF TABLES SUBMITTED

Table I shows the grading pattern in all departments over the past four years. The following points should be noted:

1. All figures are percentages and are based on final results after supplemental and deferred examinations have been written.
2. All courses, graduate and undergraduate, are included.
3. For 1968-69 and 1969-70 courses final at Christmas are not included.
4. The column labelled "other" contains courses for which no final grade is given or which are incomplete. Four divisions, namely Physics, Biochemistry, Music and Education have fairly large percentages in the "other" column. Their percentages have been reworked at the bottom of the sheet without the grades classified as "other".
5. In all years, the column headed F and N includes both categories.
6. The unit value of courses is not considered.
7. Table I should be read with caution since the grade distribution in first or second year courses with large enrolments may obscure the department's grading pattern in upper year courses.

Table II shows the grading pattern in all large (over 40) first and second year subjects in all Faculties for the year 1971-72. All figures are percentages. A few small classes were included.

Table III gives examples from 1971-72 of multi-sectioned courses where there is a wide variation in the distribution of marks between some sections. No attempt has been made to list all sections, the figures quoted were chosen to illustrate the wide variation that exists. All figures are percentages.

Table IV gives the distribution of grade point averages for all years and all Faculties. All figures are percentages.

Table V shows the grade point averages in first year Arts and Science in the groupings of clear pass, from 9 to 15 units, and less than 9 units credit. All figures are percentages.

GENERAL COMMENTS ON TABLES I - V

1. Very wide variations exist in the distribution of the various grades. These variations exist not only between departments but also between instructors in the same department.

2. In a number of departments, there has been a marked increase over the past four years in the percentage of first class marks awarded.

3. The wide variations in grading patterns in large first year courses makes it apparent that a freshman's G.P.A. may be dependent upon his particular choice of courses.

4. There has been an increase in the percentage of first class averages earned in the first year of all faculties. In first year Arts and Science, the percentage of students obtaining a clear pass has increased.

5. It is clear that very wide variation exists in the grading pattern in various sections of multi-sectioned courses. There are many possible explanations. For the protection of the student, it would appear that the Head of a Department should consider it his duty to ensure that the standards applied among the sections in such courses are equitable and that a student's chances of obtaining an A, for example, are equally great in all sections.

6. The G.P.A. a student obtains in each of his undergraduate years will determine his eligibility for undergraduate scholarships and, at graduation, is a principal factor in determining his eligibility for graduate or professional school. The awarding of graduate fellowships may well be dependent not only upon a student's G.P.A. in his third and fourth years, but also upon his G.P.A. in first and second years.

RECOMMENDATION:

Recognizing that the data presented to Senate raises the question of whether or not evaluation procedures and/or grading patterns within departments, between departments, and between faculties, are such that equitable treatment of students is ensured, the Committee recommends as follows:

- 3..
1. That heads and chairmen of departments be charged with the responsibility of taking whatever steps are necessary to ensure that the evaluation procedures and grading patterns in all courses (and sections of courses) within their departments are such that students are all treated as equitably as possible.
 2. That deans of faculties be charged with the responsibility of taking whatever steps are necessary to ensure that equitable evaluation procedures and grading patterns are used in their faculties.
 3. That the President be charged with a similar responsibility for the University as a whole.

DEPARTMENTAL GRADING PATTERNS

TABLE 1

UNWEIGHTED ENROLMENT - some are 1½ unit courses
- 1969-70 First term marks not included

DEPARTMENT TOTALS - All Courses - %

DEPARTMENT	ENROLMENT	I	II	P	F & N	YEAR	OTHER
* Grading patterns excluding 'other' category							
Anthropology and Sociology	1705	17.8	50.7	26.3	5.2	1968-69	
	1677	15.1	48.9	28.8	7.2	1969-70	0
	2265	14.6	47.1	30.4	7.1	1970-71	0.5
	2139	14.9	44.3	33.5	7.1	1971-72	0.4 (grad)
Bacteriology and Biochemistry*	84	33.3	28.6	6.0	0.0	1968-69	32.14
	55	12.7	45.5	14.5	0	1969-70	25.5
	99	25.2	39.3	14.1	1.0	1970-71	20.2
	99	27.2	25.2	20.2	1.0	1971-72	26.2 (Bact. & Bio. grad)
Biology	1478	24.0	40.7	24.7	10.6	1968-69	
	1342	24.9	38.8	23.2	9.9	1969-70	4.2
	1590	25.2	40.8	23.9	7.4	1970-71	2.5
	2020	23.1	36.8	26.9	11.3	1971-72	1.7 (grad)
Chemistry	1178	12.3	27.7	42.4	15.7	1968-69	1.9
	1413	14.0	36.1	30.2	16.5	1969-70	3.2
	1474	22.1	36.9	24.4	13.4	1970-71	2.9
	1569	20.7	34.7	26.1	15.3	1971-72	2.9 (grad)
Classics	268	34.3	34.7	17.5	13.4	1968-69	0
	326	22.7	41.2	15.3	21.8	1969-70	0
	229	27.0	47.5	14.4	10.9	1970-71	0
	336	28.5	46.7	14.5	10.1	1971-72	0
Economics	733	14.2	27.7	39.8	18.3	1968-69	
	765	13.2	31.2	36.2	19.3	1969-70	0
	1088	20.9	38.6	30.6	9.8	1970-71	0
	1226	19.9	39.8	27.9	12.1	1971-72	0

DEPARTMENT	ENROLLMENT				P	F & N	YEAR	OTHER
	I	II	III	IV				
English	3532	8.4	35.8	41.2	14.7	1968-69		
	3848	11.8	36.8	38.4	13.0	1969-70	0	
	3471	12.4	40.0	36.9	10.9	1970-71	0	
	2845	13.1	39.2	35.4	12.2	1971-72	0.1 (grad)	
French	1012	13.9	21.6	30.3	34.1	1968-69		
	1050	15.0	21.0	31.1	32.8	1969-70	0	
	504	25.0	24.0	32.5	18.0	1970-71	.3	
	475	25.2	32.2	23.1	19.3	1971-72	0	
Geography	1097	15.8	37.2	34.4	12.0	1968-69	0.6	
	1219	12.7	38.9	39.9	6.6	1969-70	2.0	
	1583	14.1	42.7	34.1	7.7	1970-71	1.2	
	1449	15.7	42.7	31.6	8.0	1971-72	1.9 (grad)	
Germanic Languages	281	26.7	31.3	24.2	17.8	1968-69		
	367	27.0	27.5	23.4	22.1	1969-70	0	
	282	33.3	39.0	17.7	9.9	1970-71	0	
	246	36.1	36.9	19.1	7.7	1971-72	0	
Hispanic & Italian Studies	441	11.6	21.3	25.9	41.3	1968-69		
	427	14.5	21.8	30.2	33.5	1969-70		
	230	16.9	35.2	28.6	19.1	1970-71	0	
	208	25.0	36.5	26.9	11.5	1971-72	0	
History	1693	8.9	40.9	39.7	9.9	1968-69	0.6	
	1900	18.9	38.6	37.7	14.2	1969-70	0.6	
	1893	14.1	44.1	32.2	8.8	1970-71	0.5	
	1741	18.0	42.7	28.0	9.8	1971-72	1.3 (grad)	
L.A. 305	83	24.0	66.2	7.2	2.4	1969-70 & 1970-71 included in English Dept.		
Linguistics	430	27.4	42.5	24.4	4.2	1968-69	1.4	
	449	24.3	51.7	18.3	5.3	1969-70	0.4 (grad)	
	455	29.6	49.0	15.1	4.6	1970-71	1.6 (grad)	
	394	44.1	39.8	8.6	4.5	1971-72	2.7 (grad)	

DEPARTMENT	ENROLLMENT	I	II	P	F & N	YEAR	OTHER
Mathematics	2136	15.3	23.7	37.9	23.1	1968-69	0
	2687	15.2	23.6	38.6	22.7	1969-70	0
	3242	15.7	24.8	38.5	20.6	1970-71	0.1
	2688	19.6	29.2	32.2	18.7	1971-72	0.1 (grad)
Philosophy	437	21.5	33.6	32.0	12.8	1968-69	0 (F=1.2%) (N=8.5%)
	563	12.6	47.8	29.8	9.8	1969-70	0
	794	15.6	44.0	28.4	11.8	1970-71	0.2 (grad)
	681	16.2	41.2	28.4	13.6	1971-72	0
Physics *	1104	19.7	31.6	29.8	13.9	1968-69	5.0
	902	19.3	32.5	27.8	15.7	1969-70	4.7 (grad)
	932	20.7	31.1	28.4	12.0	1970-71	7.7
	856	18.9	32.2	30.9	11.0	1971-72	6.7 (grad)
Political Science	536	13.2	42.0	35.6	9.1	1968-69	0
	523	19.7	47.8	22.0	10.5	1969-70	0
	671	18.9	48.4	24.2	8.3	1970-71	0
	776	18.8	44.0	26.1	10.3	1971-72	0.6 (grad)
Psychology	1594	16.1	36.1	37.6	8.4	1968-69	1.8
	1817	24.1	35.9	29.1	9.5	1969-70	1.5 (grad)
	2082	24.8	41.7	26.8	5.0	1970-71	1.4
	1899	37.8	35.4	19.7	5.2	1971-72	1.6 (grad)
Slavonic and Oriental Studies	55	30.9	38.2	12.7	18.2	1968-69	0
	114	31.6	28.1	21.9	18.4	1969-70	0
	87	39.0	35.6	17.2	8.0	1970-71	0
	119	50.4	30.2	13.4	5.8	1971-72	0
Social Work	9	11.1	88.9	0	0	1968-69	0
	40	20.0	77.5	0	2.5	1969-70	0
	38	13.1	63.1	15.7	7.8	1970-71	0
	69	15.9	62.3	20.2	1.4	1971-72	0
History in Art (Art 120)	361	11.6	26.3	46.0	16.1	1968-69	0
	336	22.3	28.9	37.5	11.3	1969-70	0.2
	380	19.7	40.7	32.6	6.5	1970-71	0.4 (grad)
	411	31.6	44.5	20.1	3.1	1971-72	0

OTHER

YEAR

F & N

P

II

I

ENROLLMENT

DEPARTMENT

DEPARTMENT	ENROLLMENT	I	II	P	F & N	YEAR	OTHER
Art	379	27.7	42.0	24.0	11.3	1968-69	
	318	27.4	43.4	23.9	5.3	1969-70	0
	271	39.1	47.2	12.1	1.4	1970-71	
	176	37.5	36.9	21.5	3.9	1971-72	0
Music *	331	15.7	34.4	19.0	11.2	1968-69	19.6
	420	11.4	25.0	32.1	19.0	1969-70	12.1 (Mus. 150-155)
	571	16.8	31.6	22.2	6.6	1970-71	" "
	710	18.8	26.4	19.4	10	1971-72	22.5 25.2
Theatre	253	29.6	43.1	22.9	4.3	1968-69	
	375	22.9	39.7	30.7	6.7	1969-70	0
	461	27.9	40.9	22.1	8.2	1970-71	0.6
	329	18.2	47.7	26.7	6.6	1971-72	0.6 (grad)
Education *	6074	19.1	38.7	21.2	3.4	1968-69	17.5
	6842	20.2	43.8	21.4	3.4	1969-70	11.2
	7833	23.4	42.4	19.5	4.0	1970-71	10.4
	7078	26.3	42.0	17.6	3.2	1971-72	10.6
* Grading patterns excluding 'other' category							
Bacteriology and Biochemistry	57	49.1	42.1	8.8	0	1968-69	
	41	17.1	61.0	19.5	2.4	1969-70	
	79	31.6	49.4	17.7	1.3	1970-71	
	73	37.0	34.2	27.4	1.4	1971-72	
Physics	1049	20.8	33.3	31.4	14.6	1968-69	
	860	20.2	34.1	29.2	16.5	1969-70	
	860	22.4	33.7	30.8	13.0	1970-71	
	798	20.2	34.6	33.2	11.9	1971-72	
Music	266	19.5	42.9	23.7	13.9	1968-69	
	369	13	28.5	36.6	21.7	1969-70	
	442	21.7	41.0	28.7	8.6	1970-71	
	531	25.2	35.4	26.0	13.4	1971-72	

DEPARTMENT	ENROLLMENT	I	II	P	F & N	YEAR	OTHER
Education	5008	23.16	46.9	25.8	4.13	1968-69	
	6075	22.7	49.3	24.1	3.9	1969-70	
	7012	26.2	47.4	21.8	4.5	1970-71	
	6330	29.5	47.0	19.7	3.8	1971-72	

FIRST AND SECOND YEAR COURSES - 1971-72

TABLE II

COURSE		ENROLMENT	I%	II%	p %	F & N %
Anthropology	100	360	9.7	38.8	45.5	5.8
Sociology	100	229	7.4	31.0	54.5	6.9
Anthropology-	200	154	12.3	59.0	22.0	6.4
Sociology	200	203	3.9	41.3	45.8	8.8
Sociology	209	46	4.3	56.5	26.0	13.0
Anthropology	240	117	7.6	45.2	35.8	11.1
Anthropology	250	149	20.8	36.2	28.1	14.7
		<u>1258</u>				
Bacteriology	200	36	50	19.4	27.7	2.7
Biology	150	344	9.0	25.0	42.1	23.8
Biology	200	127	18.1	26.7	31.4	23.6
Biology	203	124	25.0	32.2	28.2	14.5
Biology	204	123	9.7	40.6	34.9	14.6
Biology	206	138	20.2	39.8	25.3	14.4
Biology	207	128	18.7	46.8	20.3	14.0
		<u>984</u>				
Chemistry	111	161	32.2	46.5	12.4	8.6
Chemistry	120	176	3.4	21.0	44.8	30.6
Chemistry	121	183	24.0	54.6	14.7	6.5
Chemistry	124	195	7.6	23.0	44.6	24.6
Chemistry	221	74	24.3	58.1	9.4	8.1
Chemistry	224	79	21.5	29.1	21.5	27.8
Chemistry	230	131	6.1	28.2	37.4	28.2
Chemistry	231	157	29.2	41.4	24.2	5.0
Chemistry	233	48	16.6	20.8	37.5	25.0
		<u>1204</u>				
Classics	100	89	21.3	56.1	17.9	4.4
Economics	100	240	17.9	31.6	30.4	20.0
Commerce	151	97	4.1	18.5	39.1	38.1
Commerce	190	128	20.3	67.9	7.8	3.9
Economics	200	202	15.8	36.1	38.6	9.4
		<u>667</u>				
English	110	436	2.7	18.5	51.6	27.0
English	120	754	8.7	40.9	39.7	10.4
English	200	303	9.9	32.3	40.2	17.4
English	201	307	9.7	43.6	33.5	13.0
English	202	54	16.6	35.1	38.8	9.2
		<u>1854</u>				
French	160	42	14.2	21.4	21.4	42.8
French	180	147	19.0	29.9	28.5	22.4
French	285	46	26.0	34.7	17.3	21.7
French	290	76	30.2	22.3	25.0	22.3
		<u>311</u>				

COURSE		ENROLMENT	I%	II%	P%	F & N%
Geography	101	443	12.6	26.1	47.4	13.7
Geography	200	57	7.0	40.3	36.8	15.7
Geography	201	51	15.6	50.9	23.5	9.8
Geography	203	98	15.3	42.8	37.7	4.0
Geography	204	77	14.2	40.2	40.2	5.1
Geography	205	53	15.0	71.6	9.4	3.7
		<u>779</u>				
German	100	59	18.6	33.8	28.8	18.6
History	205	44	6.8	31.8	40.9	20.4
History	210	50	12.0	32.0	46.0	10.0
History	220	61	31.1	42.6	14.7	11.4
History	230	297	8.4	37.7	38.0	15.8
History	238	50	6.0	46.0	30.0	18.0
History	240	76	17.1	42.1	25.0	15.7
History	242	188	9.0	40.9	35.6	14.3
		<u>766</u>				
Linguistics	100	186	40.9	43.0	10.8	5.4
Mathematics	102	244	17.2	24.5	36.0	22.1
Mathematics	110	179	15.0	26.8	36.3	21.7
Mathematics	130	334	15.8	25.7	35.0	23.3
Mathematics	151	342	16.9	23.9	39.1	19.8
Mathematics	160	175	17.7	29.1	43.4	9.7
Mathematics	170	250	15.6	36.0	13.6	34.8
Mathematics	171	105	20.0	42.8	23.8	13.3
Mathematics	200	33	30.3	33.3	27.2	9.0
Mathematics	201	26	19.2	23.0	46.1	11.5
Mathematics	230	77	25.9	22.0	29.8	22.0
Mathematics	210	83	10.8	19.2	46.9	22.8
Mathematics	232	78	21.7	24.3	43.5	10.2
Mathematics	271	47	17.0	48.9	23.4	10.6
		<u>1973</u>				
Philosophy	100	238	7.9	40.3	39.9	11.7
Philosophy	202	94	22.3	32.9	30.8	13.8
Philosophy	212	65	3.0	56.9	33.8	6.1
Philosophy	233	45	24.4	28.8	35.5	11.1
		<u>442</u>				
Physics	101	178	11.2	26.9	41.0	20.7
Physics	103	130	10.7	40.0	39.2	10.0
Astronomy	120	77	10.3	40.2	40.2	9.0
Physics	121	54	24.0	31.4	33.3	11.1
Physics	212	75	18.6	32.0	36.0	13.3
		<u>514</u>				

COURSE	ENROLMENT	I%	II%	P%	F & N%
Political Sc. 200	217	8.2	47.9	35.4	8.2
Psychology 100	590	44.7	28.4	21.1	5.5
Psychology 220	156	19.8	44.2	25.0	10.8
Psychology 230	47	14.8	29.7	42.5	12.7
Psychology 240	77	32.4	45.4	20.7	1.2
	<u>870</u>				
Chinese 100	17	64.7	23.5	11.7	0
Chinese 200	19	78.9	21.0	0	0
Japanese 100	18	50.0	33.3	16.6	0
Russian 100	10	50.0	50.0	0	0
History in Art 120	194	22.1	53.0	23.1	1.5
Music 100	50	28.0	28.0	26.0	18.0
Music 110	58	22.4	31.0	20.6	25.8
Music 115	60	13.3	43.3	33.3	10.0
Music 140	55	14.5	36.3	43.6	5.4
	<u>223</u>				
Theatre 100	66	7.5	51.5	36.3	4.5
Art Ed. 100	123	21.0	60.1	14.6	4.0
.E. 100	59	5.0	74.5	13.5	6.7
Music Ed. 106	45	33.3	51.1	13.3	2.2
.E. 142	62	16.1	38.7	37.0	8.0
.E. 143	58	10.3	70.6	15.5	3.4
Education 145	150	18.6	44.6	31.3	5.3
.E. 149	56	5.3	66.0	23.2	5.3
Education 200	282	36.1	36.1	23.4	4.2

TABLE III

1971-72 FINAL RESULTS

(Some examples from Multi-sectioned Courses showing the range
of patterns among different sections of the same course)

Department	Course	Percentages				Enrolment		
		I	II	P	F & N			
Anthropology	200	20.6	66.6	7.9	4.7	63		
		6.5	53.8	31.8	7.6	91		
.	240	11.9	45.2	28.5	14.2	42		
		5.3	45.3	40.0	9.3	75		
Biology	150	12.5	28.3	40.8	18.2	159		
		5.0	22.1	43.2	28.6	185		
Chemistry	121	43.7	43.7	12.5	0	16		
		5.5	61.1	16.6	16.6	18		
		221	40.0	26.6	20.0	13.3	15	
		0.0	85.7	0.0	14.2	14		
		English	110	15.7	26.3	36.8	21.0	19
			0.0	4.1	58.3	37.5	24	
		0.0	0.0	43.7	56.2	16		
		16.6	27.7	27.7	27.7	18		
		120	15.8	21.8	53.1	9.3	32	
		0.0	48.0	44.0	8.0	25		
		0.0	36.1	44.4	19.4	36		
		31.0	41.3	20.6	6.8	29		
	200	7.6	30.7	46.1	15.3	13		
		0.0	52.0	36.0	12.0	25		
		27.2	36.3	27.2	9.0	11		
	201	17.3	43.4	34.7	4.3	23		
		2.8	31.4	54.2	11.4	35		
	202	11.1	11.1	66.6	11.1	9		
		0	77.7	22.2	0	9		
	203	25.0	30.0	30.0	15.0	20		
		5.5	22.2	66.6	5.5	18		
Geography	203	20.9	53.4	20.9	4.6	43		
		10.9	34.5	50.9	3.6	55		
History	240	8.3	25.0	41.6	25.0	12		
		20.0	53.3	26.6	0.0	15		
		242	20.0	48.5	28.5	2.8	35	
		2.3	28.5	47.6	21.4	42		
		Linguistics	100	73.6	21.0	5.2	0	19
		20	60	20	0	15		
		Mathematics	151	18.1	13.6	31.8	36.3	22
10.5	36.8			47.3	5.2	19		
Philosophy	100	20.0	46.6	28.8	4.4	45		
		1.5	25.0	54.6	18.7	64		
Physics	103	3.7	39.6	43.3	13.2	53		
		24.3	46.3	19.5	9.7	41		

1971-72 Final Results - cont'd.

Department	Course	Percentages				Enrolment
		I	II	P	F & N	
Political Science	200	13.2	52.0	29.5	5.1	98
		2.7	52.7	25.0	19.4	36
	216	0	27.7	50.0	22.2	18
Psychology	100	20.0	30.0	40.0	10.0	10
		57.2	29.6	9.0	4.0	199
		59.3	24.0	11.3	5.3	150
Education	200	25.4	30.0	37.5	7.0	240
		93.5	3.2	0	3.2	31
	7.1	45.2	45.2	2.3	42	
	705	6.6	80.0	13.3	0	15
	746	38.4	53.8	7.6	0	13
6.2		43.7	50.0	0	32	
		48.4	42.4	9.0	0	33

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	TOTALS/SESSION				PERCENTAGE			
	1971-1972	1970-1971	1969-1970	1968-1969	1971-1972	1970-1971	1969-1970	1968-1969
1. ARTS AND SCIENCE - FIRST YEAR								
FIRST CLASS	73	68	61	58	6.33	5.18	4.57	4.2
SECOND CLASS	336	370	306	323	29.16	28.22	22.93	23.6
PASS	125	159	168	131	10.85	12.12	12.59	9.6
SATISFACTORY (PARTIAL CREDIT)	278	369	410	415	24.13	28.14	30.73	30.3
SATISFACTORY (SUPPLEMENTAL)	62	70	73	146	5.38	5.33	5.47	10.7
UNSATISFACTORY	160	152	206	179	13.88	11.59	15.44	13.1
WITHDREW	112	115	100	111	9.72	8.77	7.49	8.1
OTHERS	6	8	10	7	0.52	0.61	0.74	0.5
TOTALS	1152	1311	1334	1370	100.00	100.00	100.00	100.00

2. ARTS AND SCIENCE - SECOND YEAR

FIRST CLASS	91	70	66	54	8.97	6.90	6.83	6.7
SECOND CLASS	337	318	291	271	33.21	31.36	30.15	33.4
PASS	87	113	98	104	8.57	11.14	10.15	12.8
SATISFACTORY (PARTIAL CREDIT)	260	292	272	220	25.64	28.79	28.18	27.1
SATISFACTORY (SUPPLEMENTAL)	52	50	65	68	5.12	4.93	6.13	8.4
UNSATISFACTORY	96	95	99	49	9.46	9.36	10.25	6.0
WITHDREW	88	71	66	43	8.67	7.00	6.83	5.3
OTHERS	3	5	8	3	0.29	0.49	0.82	0.4
TOTALS	1014	1014	965	812	100.00	100.00	100.00	100.00

3. ARTS AND SCIENCE - THIRD YEAR

FIRST CLASS	95	91	74	56	14.37	13.13	14.23	12.3
SECOND CLASS	269	290	210	188	40.69	41.84	40.38	41.1
PASS	56	52	42	60	8.47	7.50	8.07	13.1
SATISFACTORY (PARTIAL CREDIT)	139	144	113	95	21.02	20.77	21.73	20.8
SATISFACTORY (SUPPLEMENTAL)	27	26	30	24	4.08	3.75	5.76	5.3
UNSATISFACTORY	36	30	25	8	5.44	4.32	4.80	1.8
WITHDREW	36	53	24	26	5.44	7.64	4.61	5.7
OTHERS	3	7	2	0	0.45	1.01	0.38	0.0
TOTALS	661	693	520	457	100.00	100.00	100.00	100.00

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PERCENTAGE

1968 1969 1970 1971 1972

4. ARTS AND SCIENCE - FOURTH YEAR

	TOTALS/SESSION					1968	1969	1970	1971	1972	1968	1969	1970	1971	1972
	1971	1970	1971	1970	1969										
FIRST CLASS.....	112	102	105	89	20.23	21.29	20.0	20.23	21.29	20.0	20.0	21.29	20.23	21.29	20.0
SECOND CLASS.....	248	206	209	210	40.87	42.39	47.1	40.87	42.39	47.1	47.1	42.39	40.87	42.39	47.1
PASS.....	24	26	32	31	5.15	6.49	7.0	5.15	6.49	7.0	7.0	6.49	5.15	6.49	7.0
SATISFACTORY (PARTIAL CREDIT).....	160	114	107	80	22.61	21.70	17.9	22.61	21.70	17.9	17.9	21.70	22.61	21.70	17.9
SATISFACTORY (SUPPLEMENTAL).....	9	9	18	16	1.78	3.65	3.6	1.78	3.65	3.6	3.6	3.65	1.78	3.65	3.6
UNSATISFACTORY.....	20	13	10	9	3.37	2.02	2.0	3.37	2.02	2.0	2.0	2.02	3.37	2.02	2.0
WITHDREW.....	16	28	10	8	2.70	2.02	1.8	2.70	2.02	1.8	1.8	2.02	2.70	2.02	1.8
OTHERS.....	3	6	2	3	0.50	0.40	0.7	0.50	0.40	0.7	0.7	0.40	0.50	0.40	0.7
TOTALS	592	504	493	446	100.00	100.00	100.0	100.00	100.00	100.0	100.0	100.00	100.00	100.00	100.0

5. (TABLE NO LONGER USED)

6. ARTS AND SCIENCE - UNCLASSIFIED

FIRST CLASS.....	7	8	10	6	4.14	4.70	11.8	4.70	4.70	11.8	11.8	4.70	4.70	4.70	11.8
SECOND CLASS.....	10	13	10	11	5.91	7.64	21.6	7.64	7.64	21.6	21.6	7.64	7.64	7.64	21.6
PASS.....	1	2	2	1	0.59	1.17	2.0	0.59	1.17	2.0	2.0	1.17	0.59	1.17	2.0
SATISFACTORY (PARTIAL CREDIT).....	92	98	43	25	54.43	57.64	49.0	54.43	57.64	49.0	49.0	57.64	54.43	57.64	49.0
SATISFACTORY (SUPPLEMENTAL).....	0	0	0	0	0.00	0.00	0.0	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.0
UNSATISFACTORY.....	23	13	6	1	13.60	7.64	2.0	13.60	7.64	2.0	2.0	7.64	13.60	7.64	2.0
WITHDREW.....	35	35	6	3	20.71	20.58	5.9	20.71	20.58	5.9	5.9	20.58	20.71	20.58	5.9
OTHERS.....	1	1	0	4	0.59	0.58	7.8	0.59	0.58	7.8	7.8	0.58	0.59	0.58	7.8
TOTALS	169	170	77	51	100.00	100.00	100.0	100.00	100.00	100.0	100.0	100.00	100.00	100.00	100.0

7. EDUCATION - FIRST YEAR

FIRST CLASS.....	11	8	10	9	3.63	1.86	1.8	1.86	1.86	1.8	1.8	1.86	1.86	1.86	1.8
SECOND CLASS.....	93	134	167	153	30.69	31.23	30.9	30.69	31.23	30.9	30.9	31.23	30.69	31.23	30.9
PASS.....	45	85	116	116	14.85	19.81	23.4	14.85	19.81	23.4	23.4	19.81	14.85	19.81	23.4
SATISFACTORY (PARTIAL CREDIT).....	75	102	100	93	24.75	23.77	18.8	24.75	23.77	18.8	18.8	23.77	24.75	23.77	18.8
SATISFACTORY (SUPPLEMENTAL).....	20	30	47	58	6.60	6.99	11.7	6.60	6.99	11.7	11.7	6.99	6.60	6.99	11.7
UNSATISFACTORY.....	32	42	58	36	10.56	9.79	7.3	10.56	9.79	7.3	7.3	9.79	10.56	9.79	7.3
WITHDREW.....	27	26	47	30	8.91	6.06	6.1	8.91	6.06	6.1	6.1	6.06	8.91	6.06	6.1
OTHERS.....	0	2	4	0	0.00	0.46	0.0	0.00	0.46	0.0	0.0	0.46	0.00	0.46	0.0
TOTALS	303	429	549	495	100.00	100.00	100.0	100.00	100.00	100.0	100.0	100.00	100.00	100.00	100.0

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	TOTALS/SESSION				PERCENTAGE			
	1971	1970	1969	1968	1971	1970	1969	1968
8. EDUCATION - SECOND YEAR								
FIRST CLASS.....	21	46	29	33	5.66	8.61	6.22	7.6
SECOND CLASS.....	159	246	209	224	42.85	46.06	44.84	51.5
PASS.....	46	73	77	72	12.39	13.67	16.52	16.6
SATISFACTORY (PARTIAL CREDIT).....	83	98	76	43	22.37	18.35	16.30	9.9
SATISFACTORY (SUPPLEMENTAL).....	15	18	31	33	4.04	3.37	6.65	7.6
UNSATISFACTORY.....	13	21	21	13	3.50	3.93	4.50	3.0
WITHDREW.....	33	32	20	16	8.89	5.99	4.29	3.7
OTHERS.....	1	0	3	1	0.26	0.00	0.64	0.2
TOTALS	371	534	466	435	100.00	100.00	100.00	100.0

	TOTALS/SESSION				PERCENTAGE			
	1971	1970	1969	1968	1971	1970	1969	1968
9. EDUCATION - THIRD YEAR								
FIRST CLASS.....	40	27	16	26	8.13	5.96	5.47	10.2
SECOND CLASS.....	213	239	192	151	43.29	52.75	65.75	59.2
PASS.....	27	26	25	32	5.48	5.73	8.56	12.5
SATISFACTORY (PARTIAL CREDIT).....	163	126	35	21	33.13	27.81	11.98	8.2
SATISFACTORY (SUPPLEMENTAL).....	7	6	10	12	1.42	1.32	3.42	4.7
UNSATISFACTORY.....	14	11	5	1	2.84	2.42	1.71	0.4
WITHDREW.....	26	16	7	11	5.28	3.53	2.39	4.3
OTHERS.....	2	2	2	1	0.40	0.44	0.68	0.4
TOTALS	492	453	292	255	100.00	100.00	100.00	100.0

	TOTALS/SESSION				PERCENTAGE			
	1971	1970	1969	1968	1971	1970	1969	1968
10. EDUCATION - FOURTH YEAR								
FIRST CLASS.....	17	17	16	14	6.41	7.26	13.44	13.6
SECOND CLASS.....	92	96	72	71	34.71	41.02	60.50	68.9
PASS.....	5	5	7	5	1.88	2.13	5.88	4.9
SATISFACTORY (PARTIAL CREDIT).....	125	97	19	9	47.16	41.45	15.96	8.7
SATISFACTORY (SUPPLEMENTAL).....	4	2	2	3	1.50	0.85	1.68	2.9
UNSATISFACTORY.....	8	3	1	0	3.01	1.28	0.84	0.0
WITHDREW.....	13	13	2	1	4.90	5.55	1.68	1.0
OTHERS.....	1	1	0	0	0.37	0.42	0.00	0.0
TOTALS	265	234	119	103	100.00	100.00	100.00	100.0

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11. EDUCATION - FIFTH YEAR

	TOTALS/SESSION				PERCENTAGE			
	1971	1970	1969	1968	1971	1970	1969	1968
FIRST CLASS.....	18	8	9	6	16.21	11.59	16.36	23.1
SECOND CLASS.....	48	30	34	18	43.24	43.47	61.81	69.2
PASS.....	2	9	3	0	1.80	13.04	5.45	0.0
SATISFACTORY (PARTIAL CREDIT).....	36	20	6	1	32.43	28.98	10.90	3.8
SATISFACTORY (SUPPLEMENTAL).....	1	0	2	1	0.90	0.00	3.63	3.8
UNSATISFACTORY.....	1	1	1	0	0.90	1.44	1.81	0.0
WITHDREW.....	5	1	0	0	4.50	1.44	0.00	0.0
OTHERS.....	0	0	0	0	0.00	0.00	0.00	0.0
TOTALS	111	69	55	26	100.00	100.00	100.00	100.0

12. EDUCATION - UNCLASSIFIED

FIRST CLASS.....	25	20	26	13	11.26	11.29	9.38	13.0
SECOND CLASS.....	71	57	181	64	31.98	32.20	65.34	64.0
PASS.....	3	5	7	1	1.35	2.82	2.52	1.0
SATISFACTORY (PARTIAL CREDIT).....	100	70	27	8	45.04	39.54	9.74	8.0
SATISFACTORY (SUPPLEMENTAL).....	0	0	5	3	0.00	0.00	1.80	3.0
UNSATISFACTORY.....	6	8	46	0	2.70	4.51	2.16	0.0
WITHDREW.....	16	17	22	11	7.20	9.60	7.94	11.0
OTHERS.....	1	0	3	0	0.45	0.00	1.08	0.0
TOTALS	222	177	277	100	100.00	100.00	100.00	100.0

13. FINE ARTS - FIRST YEAR

FIRST CLASS.....	7	4	3	4	6.73	3.96	3.00	4.0
SECOND CLASS.....	33	44	39	35	31.73	43.56	39.00	35.4
PASS.....	9	10	14	15	8.65	9.90	14.00	15.2
SATISFACTORY (PARTIAL CREDIT).....	28	36	22	27	26.92	35.64	22.00	27.3
SATISFACTORY (SUPPLEMENTAL).....	5	1	5	5	4.80	0.99	5.00	5.1
UNSATISFACTORY.....	11	3	5	6	10.57	2.97	5.00	6.1
WITHDREW.....	11	3	12	5	10.57	2.97	12.00	5.1
OTHERS.....	0	0	0	2	0.00	0.00	0.00	2.0
TOTALS	104	101	100	99	100.00	100.00	100.00	100.0

DISTRIBUTION OF GRADE POINT AVERAGES

BETWEEN 1968-69 AND 1971-72

TOTALS/SESSION

PERCENTAGE
1970 1969 1970 1969
1971 1972 1971 1972

14. FINE ARTS - SECOND YEAR

	1971	1970	1969	1968	1971	1970	1969	1968	1971	1970	1969	1968
FIRST CLASS.....	6	4	5	2	6.12	4.59	6.09	4.1	6.12	4.59	6.09	4.1
SECOND CLASS.....	31	34	31	25	31.63	39.08	37.80	51.0	31.63	39.08	37.80	51.0
PASS.....	7	5	6	1	7.14	5.74	7.31	2.0	7.14	5.74	7.31	2.0
SATISFACTORY (PARTIAL CREDIT).....	30	33	16	12	30.61	37.93	19.51	24.5	30.61	37.93	19.51	24.5
SATISFACTORY (SUPPLEMENTAL).....	0	0	7	3	0.00	0.00	8.53	6.1	0.00	0.00	8.53	6.1
UNSATISFACTORY.....	8	7	3	1	8.16	8.04	3.65	2.0	8.16	8.04	3.65	2.0
WITHDREW.....	15	3	14	4	15.30	3.44	17.07	8.2	15.30	3.44	17.07	8.2
OTHERS.....	1	1	0	1	1.02	1.14	0.00	2.0	1.02	1.14	0.00	2.0
TOTALS.....	98	87	82	49	100.00	100.00	100.00	100.0	100.00	100.00	100.00	100.0

15. FINE ARTS - THIRD YEAR

FIRST CLASS.....	11	10	1	6	18.96	16.12	3.33	31.6	18.96	16.12	3.33	31.6
SECOND CLASS.....	29	33	14	7	50.00	53.22	46.66	36.8	50.00	53.22	46.66	36.8
PASS.....	2	3	2	1	3.44	4.83	6.66	5.3	3.44	4.83	6.66	5.3
SATISFACTORY (PARTIAL CREDIT).....	9	11	10	3	15.51	17.74	33.33	15.8	15.51	17.74	33.33	15.8
SATISFACTORY (SUPPLEMENTAL).....	0	0	1	0	0.00	0.00	3.33	0.0	0.00	0.00	3.33	0.0
UNSATISFACTORY.....	3	1	0	1	5.17	1.61	0.00	5.3	5.17	1.61	0.00	5.3
WITHDREW.....	4	4	2	1	6.89	6.45	6.66	5.3	6.89	6.45	6.66	5.3
OTHERS.....	0	0	0	0	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.0
TOTALS.....	58	62	30	19	100.00	100.00	100.00	100.0	100.00	100.00	100.00	100.0

16. FINE ARTS - FOURTH YEAR

FIRST CLASS.....	14	10	11	2	32.55	27.77	45.83	16.7	32.55	27.77	45.83	16.7
SECOND CLASS.....	8	14	5	7	18.60	38.88	20.83	58.3	18.60	38.88	20.83	58.3
PASS.....	1	0	1	1	2.32	0.00	4.16	8.3	2.32	0.00	4.16	8.3
SATISFACTORY (PARTIAL CREDIT).....	17	10	7	1	39.53	27.77	29.16	8.3	39.53	27.77	29.16	8.3
SATISFACTORY (SUPPLEMENTAL).....	1	1	0	0	2.32	2.77	0.00	0.0	2.32	2.77	0.00	0.0
UNSATISFACTORY.....	1	1	0	0	2.32	2.77	0.00	0.0	2.32	2.77	0.00	0.0
WITHDREW.....	1	0	0	1	2.32	0.00	0.00	8.3	2.32	0.00	0.00	8.3
OTHERS.....	0	0	0	0	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.0
TOTALS.....	43	36	24	12	100.00	100.00	100.00	100.0	100.00	100.00	100.00	100.0

DISTRIBUTION OF GRADE POINT AVERAGES
BETWEEN 1968-69 AND 1971-72

	TOTALS/SESSION			PERCENTAGE		
	1971	1970	1969	1971	1970	1969
1972	1971	1970	1969	1971	1970	1969

17. (TABLE NO LONGER USED)

18. FINE ARTS. - UNCLASSIFIED

FIRST CLASS.....	0	4	0	1	0.00	30.76	0.00	20.0
SECOND CLASS.....	0	2	2	2	0.00	15.38	33.33	40.0
PASS.....	1	0	0	0	5.55	0.00	0.00	0.0
SATISFACTORY (PARTIAL CREDIT).....	8	4	0	1	44.44	30.76	0.00	20.0
SATISFACTORY (SUPPLEMENTAL)*.....	0	1	0	0	0.00	7.69	0.00	0.0
UNSATISFACTORY.....	1	0	1	0	5.55	0.00	16.66	0.0
WITHDREW.....	8	2	2	1	44.44	15.38	33.33	20.0
OTHERS.....	0	0	1	0	0.00	0.00	16.66	0.0
TOTALS	18	13	6	5	100.00	100.00	100.00	100.0

GRADUATE STUDIES

COMPLETE.....	59	59	52	17	19.80	20.92	20.88	8.9
INCOMPLETE.....	224	214	189	137	75.17	54.36	75.90	72.2
WITHDREW.....	15	9	8	36	5.03	3.19	3.21	18.9
TOTALS	298	282	249	190	100.00	100.00	100.00	100.0

20. EXTENSION

SATISFACTORY (PARTIAL CREDIT).....	Included in	405	368	83.85	72.7
UNSATISFACTORY.....	partial credit	19	2	3.93	0.4
WITHDREW.....	etc. above	58	78	12.00	15.4
OTHERS.....		1	58	0.20	11.5
TOTALS		483	506	100.00	100.0

TABLE V

GRADE POINT AVERAGES IN FIRST YEAR ARTS & SCIENCE

	<u>Clear pass</u>	<u>Some credit</u>	<u>Unsatisfactory and withdrew</u>
1967-68	39.4	35.3	24.9
1968-69	37.4	41.0	21.2
1969-70	40.09	36.20	22.93
1970-71	45.52	33.47	20.36
1971-72	46.34	29.51	23.60

APPENDIX H

Continuing Education Courses: 1966-1972

1967 Spring Courses

A Century on the Maritime Scene in British Columbia
 Irish Literature and Lunacy: Myth and Murder
 Reason and Love (Religion, twelve lectures) †
 Headlines 1967 (six lectures)
 Masters of Realism (six lectures)
 Community Social Problems (ten lectures)
 An Introduction to Esperanto
 Form and Function of Cities
 What Everyone should know about Interest Rates
 Contemporary Japan
 Seminar on Forest Product Markets in China and Russia
 Conversational French
 An Introduction to Computers
 Computer Techniques
 Courses in Pre-School Education for Pre-School and Primary Teachers
 and Interested Parents
 Personality Development (Psychology II)
 Methods in Pre-School Education
 Social Studies and Science for Pre-School Children

1967-68

Beethoven's Sonatas
 England in the Sixteenth Century (nine lectures)
 Six Best Sellers
 The Sea as a Resource (twelve lectures)
 Classical Mythology (twelve lectures)
 Newer Concepts in Psychiatry and Psychiatric Nursing)
 Anatomy and Physiology of the Human Circulatory and Urinary Systems
 Genetics for Dog Breeders (eight lectures)
 Contemporary Dance
 How to Invest Your Money (six lectures)
 Conversational French
 Oral French
 An Introduction to Computers
 Cobol Programming for Commercial Applications
 Fortran IV for Scientific Applications
 University of Victoria Film Society
 The Exterminating Angel
 The Peach Thief
 The Loves of a Blonde
 The Red Desert
 Si Versailles M'Était Conté (Royal Affairs in Versailles)
 The Organizer
 The Passenger
 Une Partie De Campagne (A Day in the Country)
 Sanjuro
 Ikiru (To Live)
 Now About All These Women
 Courses in Pre-School Education for Pre-School and Primary Teachers
 and Interested Parents

Child Growth and Development (Psychology I)
 Play and Play Techniques
 Great Books Discussion Groups
 University Extension Series (ten lectures)
 Sales and Marketing Management Course
 Courses Leading to R.I.A. Designation
 Accounting I
 Commerical Law
 Courses Leading to C.G.A. Certificate
 Administrative Management Society Course
 Real Estate Appraisal Course

1968 Spring Courses

Art Before the Golden Age of Greece (six lectures)
 Pollution (twelve lectures)
 Studies in Modern Continental European Literature (ten lectures)
 Conversational French
 Political Leaders 1917-1967 (eleven lectures)
 How to Invest in Stocks and Bonds (six lectures)
 Refresher Course for Nurses
 Diploma Course in Personnel-Industrial Relations
 Economics in Canada
 Beethoven's Sonatas (seven lectures)
 An Introduction to Computers
 Fortran IV for Scientific Applications
 Courses in Pre-School Education for Pre-School and Primary Teachers
 and Interested Parents
 Personality Development (Psychology II)
 Parent-Teacher Relationships in the Pre-School Setting
 University Extension Series (five lectures)

1968-69

Towards Human Unity (twelve lectures)
 Twelve Nights of Victoria and British Columbia History (twelve lectures)
 The Mineral Wealth of British Columbia (ten lectures)
 Religion, Science and Society since the Reformation (eight lectures)
 Educational Neuropsychology
 Contemporary Dance
 The Age of François-Le-Grand (eight lectures)
 Advanced Technology in Urology Nursing
 Care of Respiratory Conditions
 French Language
 An Introduction to Computers
 Fortran IV for Scientific Applications
 University of Victoria Film Society
 King and Country
 The Sleeping Car Murder
 Diary of a Chambermaid
 Impossible on Saturday

Kwaidon
 La Terra Trema
 Syskonbadd 1782 (My Sister, My Love)
 Jeux Interdits (Forbidden Games)
 Muriel
 Peter and Paula

Great Books Discussion Groups
 University Extension Series (ten lectures)
 Courses in Pre-School Education for Pre-School and Primary Teachers
 and Interested Parents
 Psychology of Early Childhood Learning (Psychology I and II)
 Language and Literature for Pre-School Children
 Fellows' Course in Banking
 The Banker and Society
 Business Administration in Canada
 Sales and Marketing Management Course
 Courses Leading to R.I.A. Designation
 Accounting I
 Commercial Law
 Courses Leading to C.G.A. Certificate
 Administrative Management Society Course
 Real Estate Appraisal Course
 Diploma Course in Personnel-Industrial Relations

1969 Spring Courses

Mainland China: Future Economic Giant? (nine lectures)
 Conversational Spanish
 Religion, Science and Society Since the Reformation (eight lectures)
 The New Artist (six lectures)
 Studies in Modern Drama (thirteen lectures)
 Effective Reading for Work and Leisure
 The Mineral Wealth of British Columbia (ten lectures)
 An Introduction to Computers
 Fortran IV for Scientific Applications
 Courses in Pre-School Education for Pre-School and Primary Teachers
 and Interested Parents
 Psychology of Early Childhood Learning (Psychology I and II)
 University Extension Series (five lectures)

1969-70

Japan for Expo '70 (twelve lectures)
 Faiths Unlimited (ten lectures)
 Human Relations and Family Dynamics
 Effective Reading for Work and Leisure
 Basic Statistics for Scientists and Engineers
 An Introduction to Computers
 Fortran IV with Applications
 Advanced Conversational French
 Advanced French by the Audio-Visual Method
 Beginning Silversmithing



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Contemporary Dance and Jazz
Short Course in Psychiatric Nursing
University of Victoria Film Society
Shakespeare Wallah
Finnegan's Wake
The Two of Us
Love Affair
The Sea
The Hunt
Volpona
Grass
Un Chien Andalou
St. Simeon of the Desert
The Face of Another
Fellows' Course in Banking
The Banker and Society
Business Administration in Canada
Communications
Great Books Discussion Groups
Real Estate Appraisal and Economics Course
Courses Leading to R.I.A. Designation
Accounting I
Commercial Law
Administrative Management Society Course
Sales and Marketing Management Course
Diploma Course in Personnel-Industrial Relations
University Extension Series (ten lectures)

1970 Spring Courses

An Introduction to Computers
Fortran IV with Applications
Introduction to Linear Programming: Concepts and Applications
Conversational French
Conversational Spanish
Human Relations and Family Dynamics
Law for the Layman
China: From Confucianism to Maoism
Beginning and Intermediate Silversmithing
Introduction to Television Production
Can Faith Make Sense? (twelve lectures)
Crisis in the City (twelve lectures)
The Subject in Art (four lectures)
Great Works of German Literature (thirteen lectures)
University Extension Series (five lectures)
Prologue to Victoria Fair - 1970 (fourteen concerts)

1970-71

Business and Management

- Accounting
- Business Administration in Canada
- Communications
- Developing Managerial Communications Skills
- Economics
- Introduction to Banking
- Legal Aspects of Business and Basic Commercial Law
- Management Accounting
- Real Estate Appraisal

Creative Arts

- Elementary Techniques in Chinese Painting
- An Introduction to Opera
- The Musical Experience - A Daytime Course
- The Selection of Choral Music

Languages

- An Intensive Course in Spoken French - Voix et Images De France
- Conversational French
- Esperanto by the Natural Method
- Conversational German

Liberal Arts

- Canadian Defense Policy: Looking Back and Looking Forward
- Developing the Learning Capacity of Pre-School Children
- Doing Your Own Thing in Library Use
- East Asia: Its Land and People
- Economics and Public Policy
- Great Books Discussion Group
- Law for the Layman
- The Philosophical Basis of Radicalism
- Understanding the Initial Teaching Alphabet

Professional Development

- Applications of Computers in Science and Engineering
- The Education of Adults
- Continuing Education for Nurses
- The Nurse and the Counselling Relationship
- Numerical Techniques for Engineers and Scientists

Special Programs

- The Initial Teaching Alphabet Workshop
- Social Work Registration Program
- Integrated Computer Series
- Introduction to Gestalt Learning

University Extension Programme 1971 (ten lectures)



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1971 Spring Courses

Liberal Arts

Adult Reading and Study Skills
Art of India
China: Its Land, People, and Potential
Developing the Learning Capacity of Pre-School Children
A History of the Cinema from Griffith to Godard
History and Culture of Tibet
Introduction to Television Production
Law for the Layman
Libraries: Resource Use and Research
Prologue to Victoria Fair '71

Languages

Conversational French
Conversational German

Professional Development

Applications of Computers in Science and Engineering
Continuing Education for Nurses
The Selection of Choral Music

Special Programs

Integrated Computer Series
Civilisation (thirteen lectures)
Three Weekends on Campus

1971-72

Liberal Arts

The Art of India
Audio-Visual Media and Methods: Theory and Practice
The Bijou Dream: The Cinema as Art and Entertainment (1896-1940)
Developing the Learning Capacity of Pre-School Children
Japan: A Cultural and Economics Perspective for Businessmen
Law for the Layman
Libraries: Resource Use and Research
The Life and Works of Bertolt Brecht (twelve lectures)
The Logic of Problem-Solving
The Music of Canadian Composers
Plants and Man
Educational Travel Program - Soviet Union, Great Britain

Languages

Conversational German
Elementary Russian

Professional Development

Continuing Education for Professional Engineers
Genetics for Nurses
The Initial Teaching Alphabet Workshop
Social Work Registration Program
What's New in Nursing?
Test Construction and Evaluation for Teachers in Nursing Education

Business and Management

Business Administration in Canada
Developing Managerial Communications Skills
Economics
Introduction to Banking
Principles of Accounting
Real Estate Appraisal
Integrated Computer Series

1972 Spring Courses

Conversational German
Developing the Learning Capacity of pre-school Children
Law for the Layman
The Contemporary Cinema: Mizoguchi to Godard
The Music of Canadian Composers
Plant Physiology for Gardeners
The Science of Creative Intelligence
Six Novels for a Winter's Night
Beginning Piano for Adults
Continuing Education for Nurses
Canadian Economic Decisions
Psychology Today
Introduction to Computers
Elementary Programming
Introduction to Applications Programming
Three Weekends on Campus

1972-73

Languages

French Language Diploma Program for Adults
Beginners' Greek
Conversational German
Conversational Italian

Liberal Arts

Applied Plant Physiology for Gardeners
Conversations with a Philosopher
Developing the Learning Capacity of Pre-School Children
English Composition for Adults
Introduction to Economics
Poetry Workshop with Robert Sward
The Geology of Greater Victoria
The Role of the Child in Fiction

Creative Arts

Beginning Piano for Adults
Developing Effective Speech
Technique and Artistry in Contemporary Dance

Special Lecture Series

The Energy Crisis
A Woman's Place: The Role of Women in Canadian Society

Four Mondays with Paul Reps
 Great Battles of History
 How Soil is Studied and Why
 Law for the Layman

Mathematics for Parents: Everything you wanted to know about
 Modern Mathematics but were afraid to ask.

What's New in Mathematics?

Business and Management

Business Administration in Canada
 Developing Managerial Communications Skills
 Fundamentals of Accounting
 (A) Introduction to Computers
 (B) Elementary Programming
 (C) Introduction to Applications Programming
 Principles of Accounting
 Real Estate Appraisal
 Understanding Investment Securities

Professional Development

Continuing Education for Nurses
 Basic Social Work Methods
 The Initial Teaching Alphabet Workshop
 Using the Provincial Museum as a Resource Centre for Teachers

Film Society

University of Victoria Film Society
 Modes of Film Communication

APPENDIX I

President's Research Support Advisory Committee (1967)

At the end of August 1967 the University was invited to submit a brief to a Study Group, chaired by John B. Macdonald, which had been established by the Science Council of Canada and the Canada Council to study the support of research in Universities. In order to prepare such a brief President Taylor struck the following committee: G. W. Bertram (Chairman), J. M. Dewey, P. Garvie, D. W. Halliwell, S. A. Ryce, A. Saddlemyer, W. R. D. Sewell, F. Tyler, and Mrs. R. G. Lawrence (Research Assistant). The resulting brief was transmitted to Dr. Macdonald in November 1967 and President Taylor, with several members of the Committee, subsequently appeared before the Study Group in order to make clear the position of the University of Victoria on the support of research.

In 1969 the Senate of Canada established a Special Committee on Science Policy under the chairmanship of the Honourable Maurice Lamontagne, and the University was again asked to submit a brief. Acting President Wallace reconvened the Research Support Advisory Committee (Dr. B. O. Kurth replacing Dr. Saddlemyer who was off campus), which suggested that the University resubmit the brief prepared for the Macdonald Commission, together with five additional recommendations. These were sent to Senator Lamontagne in April 1969.

Acting President Wallace subsequently asked the Committee, on the basis of its investigations, to make further

recommendations on research policy at the University of Victoria. Such recommendations were submitted to Acting President Wallace on May 13, 1969.

Although the briefs and recommendations discussed above are somewhat out of date they are official statements of the University's policy on research, and as such were used by the Commission in its consideration of this aspect of academic development. In spite of their apparent importance none of these studies were made available to the University community and they have therefore been reproduced here. Included are the original brief to the Macdonald Commission, the additional recommendations submitted to Senator Lamontagne, and the recommendation on research policy at the University of Victoria.



110 Argyle Street,
Ottawa, Ontario.

28 August, 1967.

Dr. Malcolm G. Taylor
President
University of Victoria
Victoria, B.C.

AUG 31 1967

PRIVY COUNCIL SECRETARIAT

Dear Dr. Taylor:

The purpose of this letter is to acquaint you with plans for a study of Support of Research in the Universities which is being undertaken at the request of the Science Council of Canada and the Canada Council. The study which will be carried out under my direction has been commissioned by the Science Secretariat, with the following terms of reference:

To examine and report on

- (i) The broad purpose and objectives of the Government and the Universities that should be served by the research support program;
- (ii) The principles and policy that should be adopted in attaining these objectives;
- (iii) The organization, mechanisms and management practice that will best meet the principles and objectives that are defined by the study.

It is intended that the study should include all research in the universities. Accordingly, I shall have the assistance and advice of individuals who represent the humanities and social sciences as well as the natural sciences, in making the necessary investigations and

preparing the report. Communication with the Science Council of Canada and the Canada Council will be through a special committee, also made up of representatives of the humanities, social sciences and natural sciences, under the chairmanship of Dr. Roger Gaudry - Rector of the University of Montreal. The purpose of Dr. Gaudry's committee is to receive progress reports and a final report from the Study Group. Source material to which the Committee will have access may not appear in detail in the Report, but will be used to advise the Science Council and the Canada Council when the final Report is presented to them. The Report as prepared by the Study Group will be published by the Science Secretariat.

This letter is your invitation to submit a brief to me and the Study Group expressing your institution's views concerning any of the issues encompassed by the terms of reference of the study.

For your assistance in the event you wish to submit a brief, I suggest the following as topics on which you might wish to comment:

- 1) Goals for the Federal Government in the support of research;
- 2) The Universities' objectives in conducting research -
 - scholarly work
 - applied work, in public interest
 - training
- 3) Allocation of funds to various types of research -
 - (a) comments on present allocations;
 - (b) suggestions for changes in proportions allocated to various purposes;
 - (c) mechanisms for reviewing and determining allocations.



UNIVERSITY OF VICTORIA

VICTORIA, BRITISH COLUMBIA

Office of the President,

November 21st, 1967.

Dr. John B. Macdonald,
Science Secretariat,
Privy Council Office,
110 Argyle Street,
Ottawa, Ontario.

Dear Dr. Macdonald:

Following your letter of August 28th and in view of the very great importance this University attaches to your study, I appointed a Committee of Faculty members representative of the Humanities, Social Sciences, Physical and Life Sciences, Education, and Fine Arts. Although we do not speak with multi-voices of the multiversity, we do represent, apart from the health professions, most of the areas with which research funds granting agencies of the Federal Government are concerned.

This Committee has worked at "forced draft" since its appointment and I have been privileged to share extensively in its deliberations. In addition to its own research and discussions, the Committee surveyed the entire Faculty by means of questionnaires to which there was a remarkably high response (and which are included in the Appendix).

The brief includes a statement of the paramount importance of research and of creativity in contemporary society, an examination of the relatively low level of Canadian support for such activity in comparison with other industrialized nations, the primacy of Federal Government responsibility in the national interest, and the need for massive increases in support, especially in the Social Sciences, Humanities, and Fine Arts if the Canadian dream is to be fulfilled. Perhaps one of our most important recommendations is that relating to the lack of support for research in learning and training. Here Canada lags hopelessly, probably because of the constitutional allocation of "education" to the provinces. But this is not education as such; it is clearly social science research as this brief makes clear.

. . . . 2

- 4) Scope of support -
 - (a) grants-in-aid or full support?
 - (b) indirect costs
 - (c) degree to which government should be involved in costs of training for research
 - (d) kinds of grants required
 - (e) contract research
- 5) Liaison between universities and government research establishments;
- 6) Review procedures;
- 7) Proposals for organizational plan for the federal support of research in universities.

In addition to inviting briefs, the Study Group intends during the year to visit universities and other interested organizations in Canada to seek discussions with research workers and officers of the institutions. I will advise the Presidents further about our visits in another letter. In the meantime, if you intend to submit a brief, it would be helpful to have it in our hands by the end of October.

Yours sincerely,

John B. Macdonald

**BRIEF TO THE SCIENCE COUNCIL OF CANADA
COMMITTEE OF ENQUIRY INTO THE SUPPORT
OF RESEARCH AT UNIVERSITIES**

**President's Research Support Advisory Committee
University of Victoria
VICTORIA, B.C.**

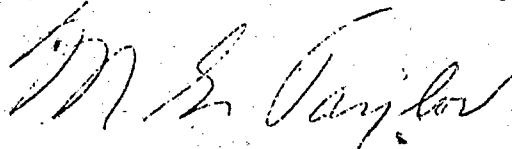
22 November, 1967

Dr. John B. Macdonald.

2.

We hope that your Committee will take a strong stand on the importance of national leadership in support of research in all these areas on the grounds that there is a national interest that is far greater than a sum total of individual provincial interests, that this national interest should be acknowledged by the Federal Government, and that it should be vigorously and generously pursued.

Yours sincerely,



Malcolm G. Taylor,
President.

MGT:js

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BRIEF TO THE SCIENCE COUNCIL OF CANADA
COMMITTEE OF ENQUIRY INTO THE SUPPORT
OF RESEARCH AT UNIVERSITIES

1. The Functions and Goals of Research in Contemporary Society

The close relationship existing between research, technological advance and economic growth is by now an acknowledged factor in the development of the modern nation: economic growth hinges in large part on the development and application of new technologies, and this in turn depends upon a sustained level of investment in research. [see Appendix D] To ensure that this takes place, governments in most advanced countries have had to assume a role of leadership, providing both encouragement and direct support of research efforts.

But the attainment of higher incomes is not the only goal sought by society. Equally important, and hence a further reason for governmental responsibility, is the improvement of the quality of life. Modern societies are faced with increasingly complex social problems, created in part by the rapid advance of technology and in part by the changing desires and aspirations resulting from growing affluence. Some of these problems have become so critical that they have threatened to lead to major social disruptions. An increasingly urgent task, therefore, is to gain further understanding of these problems and their origins, and to seek solutions. Since these are clearly matters of public concern, the government must actively encourage the search for solutions.

The improvement of the quality of life also depends upon the extent to which opportunities are provided for enriching the society's culture, particularly through its literature, its music and its arts. Some societies rely primarily on private patronage to

provide support for the enrichment of culture; however, in modern societies there is generally a recognition that the benefits of such enrichment go far beyond the private individual and the local community. Large scale support of work in the humanities and the arts, therefore, has also become a public responsibility.

Governments have placed great importance on developing strong education systems, for it is through such systems that advances in economic growth and social well-being can be attained and appreciated. The development of high calibre universities is a major goal in this connection. Such institutions provide the highest level of training in certain fields, but they are also a major vehicle for stimulating invention and discovery. It is in fact through the constant search for new knowledge that levels of training are raised; research, then, becomes an essential aspect of the higher education process.

In the United States and most of the western European nations research is accorded a high priority in public policy and an important part of the national budget is allocated for the support of research. Canada ranks far behind such nations in this respect. At present approximately 1 per cent of Canada's Gross National Product is allocated to research, compared with over 3 per cent in the United States, and over 2 per cent in the Soviet Union and in the United Kingdom. [Table 1] In 1966 the estimated total Canadian expenditures on scientific activity amounted to \$620 million.

There are several possible reasons why the level of expenditures on research and development in Canada has been lower than in most similarly advanced industrial nations of the world. One is that the intimate relationship between research, technological advance, and economic growth has not been specifically recognized by policy makers in Canada. Nor do they seem to have been sufficiently aware of the need to improve understanding of the causes of many of the social problems which now face the nation. Another possible explanation, particularly in connection with industrial research, is that many Canadian industries are subsidiaries of companies in the United States. The tendency is

for the latter to undertake research in the United States rather than in Canada. A further reason for the small amount of research in Canada may be that tax-reduction incentives have been insufficient to encourage industries and other agencies to expand their efforts in this connection.

There are other possible explanations too. One is the absence of large private foundations and institutions which support research. In the United States, for example, the existence of the Ford, Rockefeller, Carnegie, Mellon, and Guggenheim Foundations, and of such organizations as the National Bureau of Economic Research and the Brookings Institute has had a profound effect on the fostering of research, particularly in the social sciences and the humanities. Such organizations have made major contributions to the support and encouragement of research in the physical sciences also. In Canada, where per capita income is only 25 per cent less than in the United States, one would have expected that there would have been a proportionate amount of private support for research. Unfortunately this has not been forthcoming. The absence of research support from private organizations, therefore, places a special responsibility upon the federal government.

The amount of research support in Canada has not only been minimal but only a small proportion of this support has been allocated to the universities. In Fiscal 1966, for example, when estimated total expenditures on scientific activity amounted to \$620 million, only \$62 million (or 10 per cent) was allocated to research undertaken at universities. The federal government provided some \$294 million of the total funds allocated for scientific activity in that year, but spent 62 per cent (or \$182 million) of this on research in government agencies, 24 per cent on research undertaken by industry, and only 14 per cent on research carried out by universities.

The lack of research funds and the heavy emphasis on "in house" research (that done by the funding agency itself) in Canada have had several important effects. First, it has doubtless put a brake on academic productivity. Potential researchers have made much

more modest contributions than they might otherwise have done. Second, and more seriously, it has limited the potential contribution of Canadian universities in training senior and graduate students. Graduate work in Canada has been later in starting and much slower in getting under way than in the United States. A result has been that Canadian students have generally gone to the United States and even to Europe for their post-graduate training. Unfortunately, many of the best have not returned to this country. Third, the lack of research funds has led to a migration of some of the nation's brightest scholars to the United States and elsewhere. While it is true that this emigration has been partly offset by an influx of highly trained people, particularly from the United States and the United Kingdom, it is probable that Canada has suffered a long-run social loss. Many of those who have come from the United States will stay only temporarily while acquiring experience and searching for opportunities in their home country. Similarly, some of those who have come from the United Kingdom will move on to the United States. Moreover, it is a long time before most of those who come from elsewhere, particularly in the social sciences, become interested in Canadian problems as research topics. Understandably, they prefer to continue to work on problems they have been studying elsewhere.

In view of these problems, it seems that the time has come for a penetrating appraisal of research support in Canada and especially in its universities. This brief is intended as a contribution to such an appraisal. It is the product of a small committee of physical scientists, social scientists, and representatives from the humanities, education, and the fine arts. It draws on the views and experience not only of the members of the Committee but also of the entire faculty of the University of Victoria. As part of its work the Committee sent out a questionnaire to every faculty member, and to each Department Head, and conducted interviews with a selected number of them as well. Copies of these questionnaires and a brief summary of the returns are attached to this brief.

[Tables 2, 3, 4, and 5]

2. Research and the University

Research may take many forms, and we have defined it broadly in preparing this brief to include inquiry, experiment, scholarly work, publication, and creative activity of all kinds. So defined, its central importance to the university is clear. It is the first and last step of the scientific method; it gives meaning to the works of the past by exploring them in terms of the needs of to-day; it continually relates man's aspirations, hopes and practical needs to his immediate environment. It keeps those involved in the educational process alert and eager, thus in turn fostering the enthusiasm and need for knowledge in others. And within the practical needs of the nation, it can seek to provide solutions to problems of economic growth, of the development of natural resources, of the expansion of national consciousness, and of the quality of life. In the evolution of knowledge, the university which does not foster and encourage research must surely die of stagnation.

Universities, therefore, are by definition one of the principal institutions in which research must be conducted. If Canada is to succeed in establishing a number of significant universities, the research function requires a very high priority.

3. Research and the Role of the Federal Government

The understanding appears to have developed in Canada that the provincial governments are responsible for undergraduate education, leaving the sponsorship of research and graduate work a responsibility of the federal government. There are impelling reasons why this responsibility should remain in the hands of the federal government: the fruits of research through publication and patent affect the cultural and practical life of the nation as a whole, and may not even be applicable to the campus where the research was undertaken (indeed, Canadian scholars abroad represent the achievements of the entire nation in world culture); graduate students trained through the process of research on one campus frequently

go to universities elsewhere in Canada and are urgently required to staff the rapidly expanding institutions across the country; the climate of enquiry which is conducive to research extends beyond any single campus or indeed any province or region in Canada, and should not be hampered or restricted by subordination to provincial controls.

The federal government, therefore, should continue to support research in Canada. But it must do so much more vigorously than it has done in the past. It is evident that other agencies are likely to be unwilling or unable to support an expanded research effort in this country. If the federal government were to decide to withdraw its involvement in research support, at least three consequences might follow - all of them serious. One might be a general reduction in the amount of investment in research in the country. Another might be a narrowing of the focus of research, particularly if the responsibility for research support were to be left entirely to the provinces. A third consequence might be a serious duplication of effort and a resultant wastage of already scarce human and capital resources.

Not only must the federal government substantially increase its support of research in Canada, but it must also correct present imbalances between research in the physical sciences and research in other fields, and between "in house" research and research at the universities and other agencies. In Canada about 99 per cent of the total funds devoted to research and development are expended in the physical sciences. Less than 1 per cent is spent on research in the social sciences, the humanities and fine arts. If research undertaken only at universities is considered, the proportion allocated to social science research is somewhat higher, but is still very small. In Fiscal 1966 it amounted to about 6 per cent of funds allocated for research at universities.

While it is evident that the investment in physical science research has yielded handsome returns in the advancement of knowledge and training in this field, it is also clear that there has been a sad neglect of other fields of enquiry. It is important that

Canada remain at the technological forefront, but she must also be prepared to deal with the problems that result from such a position, such as the spread of automation and the growth and decline of economic regions. In addition she must develop an increasing capacity to deal with the social problems of an affluent and urbanized society, and with the political problems of confederation and of Canada's location next to a powerful and influential neighbour. What is needed is not a reduction in support of physical science research but a general increase in research funding with much greater emphasis placed on social science research than has been the case to date.

There must also be a shift from the present emphasis on "in house" research in government agencies to much greater support of research at the universities. This would have many important effects. It would provide a stimulus to increased academic productivity. It would also enable the universities to train more undergraduates and graduates to much higher levels than are now possible, and would therefore contribute directly to the productivity of the agencies which employ such students after the completion of their university programs.

4. The Needs of the Newer Universities

It should be clear from the foregoing that increased support is required for research at all universities in Canada. Most of the larger and older universities already have large research facilities and well established graduate programs. Generally they are better able to attract funds for research, not only because of their established reputations, but also because they have already overcome some of the operational difficulties facing the newer and expanding universities. The danger is that a disproportionate amount of the nation's research funds will be allocated to the older and larger universities, thus reducing the potential contribution of researchers at the newer and smaller institutions. The research policy of the government, therefore, must take into account the special problems and needs of the latter.

There is nothing that the researcher prizes more than time to do his research. The university researcher must divide his time between research and teaching. At the larger universities he is much more able to develop a proper balance in this connection than he is at the smaller university where teaching loads are typically much heavier. A recent survey undertaken by the University of Victoria shows that average teaching loads at most of the larger universities, where graduate work and research are most firmly established, are generally lowest.

If the calibre of the newer universities is to be raised, something must be done to make possible a reduction in teaching loads. A variety of avenues might be explored in this connection, of which one of the most fruitful might be the provision of funds for releasing a part of a faculty member's time. This is a well established practice in the United States and no doubt accounts in part for the proportionately greater research productivity of its scholars.

But there are other special problems faced by the newer universities in expanding their research efforts. The need for buildings and library facilities is especially acute. Most of the new universities have found it difficult to keep up with the construction of buildings and the provision of equipment for teaching purposes, let alone for research purposes. It is evident that past federal policies relating to capital grants have not been satisfactory in providing the buildings and equipment needed for research.

These policies as they relate to the development of library facilities have been even more inadequate. Under present Canada Council regulations, the admittedly small annual grants have gone to the universities with active programs of graduate study and research. The new or developing universities have found difficulty in qualifying for such grants. Inadequacy of library facilities has several adverse effects not only on research potentialities but on training as well, for in many fields the library acts as the plant and sometimes as the laboratory too. It is an unchallenged maxim that prospective graduate

students and, even more, senior scholars examine the size of the library before making any other enquiry about an institution. Unless the newer universities are able to accelerate considerably their library development programs, the development of graduate programs and research will be seriously impaired.

The problem of library expansion is not peculiar to the newer universities, of course, but it is felt most severely there. In Canada as a whole library development is far behind that in several other countries. Library collections and library buildings must be expanded, and not in a limited manner. This is a matter of the greatest urgency: federal grants to libraries must be considered not a reward, but an encouragement.

5. The Needs of Various Disciplines

Researchers in all disciplines agree that a much greater level of support is needed. The nature of the support required, however, varies from discipline to discipline. The following review of requirements of various fields of research is based on comments and suggestions received in the survey undertaken by the Committee in connection with the preparation of this brief, and on studies of the levels and growth of research expenditures in Canada in recent years.

(i) Physical Sciences and Natural Sciences

Although research support for faculty in the physical sciences is only about one-third of the total granted for this purpose in the United States, the level of support in the physical sciences and natural sciences appears to have been fairly satisfactory, given the size of the universities in Canada and the degree of development of graduate programs. It is felt, however, that expansion of support must continue, and at a somewhat higher rate than in the past if we are to keep pace with university expansion and if we are to remain at the technological forefront. A continued expansion of support

at a rate of at least 20 per cent per annum has been suggested by the Canadian Association of Physicists, and the Committee considers this a realistic target for research support in the physical and natural sciences. It should be noted, however, that this does not take into account inflationary factors, and a somewhat higher figure would perhaps be more appropriate.

Until now the principal sources of support for physical science research and natural science research have been government and industry, with the federal government providing the largest proportion of the funds. The major agencies furnishing support in this connection have been the National Research Council, the Defense Research Board, the Medical Research Council, and various operating agencies of the federal government, such as the Department of Agriculture, the Department of Transport, the Department of Fisheries, and the Department of National Health and Welfare. Allocations to universities by these agencies have been relatively small compared with their total research budgets. The National Research Council, for example, had a budget of about \$61 million in Fiscal 1966; of this \$21 million or 34 per cent is allocated to research undertaken in educational institutions - mainly universities. An increase in the proportion of funds allocated to universities would not only accelerate research but would also have beneficial effects on training.

While there is general satisfaction with present policies and procedures relating to research grants in the physical sciences and the natural sciences, the need for co-ordination of policies and procedures of various agencies has been pointed out. It is not yet clear how far the Science Council and the Science Secretariat will succeed in providing this co-ordination.

(ii) Social Sciences

In contrast with the situation in the physical sciences, research funding in the social sciences is far from satisfactory, both in terms of the amount of money allocated and in terms of the mechanisms used for allocating it. It has been impossible

for the Committee to ascertain exact figures, but it is estimated that in 1965-66 not more than \$2 million was allocated to social science research in Canada. True, much of physical science research is "big science" which requires expensive equipment and capital expenditures on buildings and so on. This does not account entirely, however, for the discrepancy. Part of the reason lies in the fact that the organization which has the main responsibility for encouraging and supporting physical science research, the National Research Council, has been much more effective in performing its tasks than has its opposite number in the social sciences, the Canada Council.

One explanation for the differing effectiveness of the two bodies may be the fact that they operate with different guidelines. The National Research Council is long established (it was set up in 1916), has its science and engineering laboratories in various geographical locations, and has long-term contacts with the universities not only through its representatives but through familiarity with the faculty and projects. There has been enough time to smooth out the rough edges. The Council needs more money of course, but in terms of concept and structure it appears to be satisfactory.

The Canada Council, on the other hand, is only ten years old. It operates on a much more limited budget and its responsibilities far exceed its means. We appear in fact to be suffering from the same kind of "split responsibility" psychosis which has dogged Canada since the introduction of the BNA Act. Everything that is not specifically and directly "scientific and industrial research" seems to be the responsibility of the Canada Council: the arts, the humanities, and the social sciences. Yet in structure and financial support it is impossible for the Canada Council to operate efficiently over such a wide area. This leads to further discrepancies both in funding and in operation. To support a symphony or a ballet company requires the funds equivalent to the demands of "big science". Since many of the financial needs in the humanities and social sciences are hidden (i.e. time and travel rather than equipment), these two areas inevitably suffer. Furthermore, it is a highly debatable point whether a small group of officers, no matter how experienced

and imaginative, can be sufficiently informed in all these different areas to make decisions on policy or support. Many research grants in the humanities and social sciences are small and dependent on specialized knowledge of the field; yet the academic panel of sixteen advisors is heavily weighted towards representatives from eastern Canada and meets only to advise on larger grants. The majority of requests for research grants are handled only by the small group of officers.

The dangers in this system are apparent: judgment must frequently be made on the manner in which the project is presented rather than on the worth of the project itself; projects in overlapping areas may be overlooked; lack of familiarity with the work being done across Canada forces applicants to stress areas of research which while more obviously practical may not always be the most worthwhile contribution to the advancement of knowledge, or to seek out well-known referees thereby again jeopardizing independence.

Difficult as this is for the humanist, there is an even greater hazard for the social scientist in this organization. Frequently his projects fall between the areas of responsibility cited for the National Research Council and the Canada Council; although every effort may be made to accommodate the application, the specified research into society may depend upon aspects of both areas and the applicant will inevitably suffer from judgment based upon restricted knowledge one way or the other. Furthermore, the tools and equipment vary, sometimes depending upon the methods of the scientist, sometimes upon the ways of the humanist. Yet, just as it is difficult to separate completely the interests of humanities and fine arts, so it would be impossible to cut off completely the social scientist from his colleagues in either the National Research Council or the Canada Council.

The answer seems to lie in a complete reorganization of the structure of research funding in Canada. An independent agency should be set up to oversee and administer the needs of all research and creative activity in Canada. It might be called the Research

Council of Canada. It would be widely representative of various disciplines and professional interests, and of the different regions of Canada. Under it would be a number of advisory councils, representing the various disciplinary groups. These might be a Physical Sciences Research Council (consisting of the National Research Council and other agencies which provide support in the physical sciences); a Social Sciences Research Council; a Humanities and Fine Arts-Research Council (consisting of that part of the Canada Council that concerns itself with support of university research in these fields); a Health Sciences Research Council; and a Council on Research in Learning and Training. The structure of the various advisory groups would depend upon the nature of the disciplines they would represent. The Research Council of Canada would have its own Secretariat, independent of the Privy Council. [Figure 1]

Besides a restructuring of funding mechanisms, there must be a considerable expansion of research support in the social sciences. A rate of increase of considerably above 20 per cent per annum for the next 10 years is needed, possibly in the order of 50 per cent per annum. Any rate of increase less than this will hamper the development of high calibre research and training programs in the social sciences at Canadian universities.

There is also a need to alter many of the policies relating to the funding of social science research. The survey undertaken by the Committee brought forward several suggestions in this connection. Among them was the need for provision of longer term grants than is now the case in the social sciences. A book, for example, can seldom be written in one summer, or even one year. In some projects at least a year is needed to get the research underway. Another suggestion was for the liberalizing of policies relating to support of sabbatical leave, aimed at ensuring that the faculty member involved suffers no financial loss by taking such leave. Grants must be provided which will enable him to cover his normal salary and, if he decides to travel, to be able to take his family with him at no personal cost for transportation.

The problem of summer research was also brought to the Committee's attention. The Committee agrees with the Canada Council's comment (in its Tenth Annual Report, pp. 42-43) that further study be given to this matter. At present many of those who might undertake research during this period either teach summer school or seek employment elsewhere, such as in government agencies or industry. Summer teaching and experience elsewhere can be invaluable but can sometimes restrict the scholar's potential contribution to research. Work in industry or in government agencies, for example, tends to be focussed on the problems in which these employers are currently interested, rather than on problems which the university researcher might prefer to study.

A further suggestion by the Committee was for the provision of support for Masters as well as doctoral work, as is the case in the physical sciences (through NRC support). This would help to strengthen graduate programs at universities by offering an alternative to those students who would otherwise have gone to the United States, where support for Masters programs can usually be obtained.

(iii) Humanities and Fine Arts

As noted earlier, the main source of support for research in the humanities and fine arts is the Canada Council. In Fiscal 1966 the Council allocated approximately \$3.5 million, or 5 per cent of its funding to the Arts. In the same year total support of the Council for the humanities and social sciences together was approximately \$2.9 million, or 45 per cent of the Council's budget. If, as appears to have been the case in previous years, about half of the funds allocated to the humanities and the social sciences went to the humanities, then total funding for research in the arts and the humanities was about \$4.9 million in Fiscal 1966. Submissions of researchers in the humanities and in the fine arts suggest that the present level of funding is inadequate, and that modifications in present policies for research funding are needed. Many of the problems relating to research support in the humanities have already been discussed in relation to the social sciences. As with

the social scientist, many of the requirements for research in the humanities are hidden: time is essential, as is travel; the demand for equipment is small compared to the sciences, except for the basic "plant", the library. Furthermore, the dangers inherent in the present administrative structure and system of funding of the Canada Council are similar to those faced by the social scientist; a broader representation both in interest and geographical area is necessary if the beginning researcher and the new institution are to receive adequate attention. Especially essential is a re-examination of the need for support at the Masters level, the provision for long-term research grants and more liberal leave policies at the post-doctoral level, and increased direct financial aid to university libraries without restrictions concerning areas already offering graduate work.

It is apparent therefore that the remedies suggested by the Committee for the humanities go hand in hand with those suggested above for the social sciences. Somewhat different problems are faced by the fine arts. It is only recently that the fine arts - Art and Art History, Music and Theatre - have all been accepted as a normal part of the academic offerings of a university. Since they are concerned with performance as well as with learning, they tend to be more before the public than most disciplines, and they contribute substantially to the general life of the campus, and, we hope, to the community. In this role, their university location is valuable, for they are freed from many of the pressures of box-office and can explore their media in an atmosphere of intellectual curiosity and critical scrutiny. It is no bad thing for the fine arts that they have to meet standards similar to those of other disciplines in degree programs, though the right balance between academic courses and professional training is not an easy one to set, and will certainly be no easier for the new media when they become fully established in a university context. A School or Faculty of Fine Arts, however, provides exceptional opportunity for interdisciplinary courses for its students, and it is this widening of the mind that gives the university such an advantage over the conservatory or studio or drama school.

In the area of fine arts, research is not easily defined. Art and Theatre History and Musicology practise the same kinds of research as other disciplines, and require support not only for research, but for the resources -- scores, library collections, slides, museum collections, etc. For the creator and the performer, however, research may well be the creative act itself, issuing in a work of imagination rather than of scholarship or, in the case of a performer, in a series of performances rather than in publication. A painter studying problems of light or color will do so by painting; a musician researching performance practice may incorporate the most valuable results in performances or recordings; a theatre designer shows the fruits of his research in a particular production, and an instructor in acting through the changes in the way he teaches. Furthermore, in many cases in the fine arts, research will mean keeping in contact by personal attendance at exhibitions, theatre productions, concerts, the experience of architecture -- actualities that cannot be reproduced and circulated for him to study. A wide definition of research would seem essential, therefore, in this field.

The researcher in fine arts has much the same needs as his colleague in the humanities: travel, library collections, resources such as slides, films, recordings, and relief from his teaching load. His research does not as a rule require much space, expensive equipment, or research assistance.

Most research funding should be concentrated at the graduate level and above, but there is a need at the undergraduate level for some financial help, particularly to give early encouragement to scholarship, and to sustain students through the summer when professional skills (and particularly physical skills) may otherwise be allowed to lapse for five months, and so take longer to recover. This too implies a definition of "research" that includes practice as a means of discovery.

(iv) Learning and Training

Far too little research is being undertaken in this country on the improvement of learning in the school setting, on the learning process, on social influences in the classroom.

on curriculum design and evaluation, and on new instructional media. In view of the national importance of manpower training, the federal government must accept the responsibility to vigorously promote and support this type of social science. These investigations can and should be undertaken by members of Faculties of Education who, by training and experience, are qualified to consider the aims and purposes of education in our society.

The schools constitute a most extensive learning laboratory, but their potential is almost untouched, even though there is evidence that teachers and university faculties are anxious to develop systematic and extensive programs of co-operative research and development. Funds for investigating the improvement of learning are not available - as appeals and applications to the Ford Foundation, the Canada Council, and the Federal Department of Manpower and Immigration have demonstrated to applicants in Victoria.

Two types of investigation into learning processes are necessary. The first is basic or fundamental research intended to extend learning theory; the second is the development and applied research which are required to improve the quality of learning in the classroom. Research into the theory of learning can be conducted with limited resources, but the usefulness and applicability of these investigations are restricted; they require extensive subsequent applied research to assess their significance and implications for school learning. This latter essential type of research is conducted in classrooms with school materials over long rather than short periods of time; it contributes more directly to practice than to the extension of theory. But such investigation is time-consuming and expensive because the curricula and the evaluative instruments remain to be developed and continuous revision is required. The cost to Canada of failure to undertake such research lies not only in the backwardness of our educational systems but also in the fact that by default such changes as do occur, for instance in curricula, are likely to be imported from the United States, where substantial financing has permitted extensive research; these imported curricula reflect the aims of American society and may not be appropriate to Canada.

In many respects teacher education has failed to provide teachers with the preparation they require in order to offer the most effective type of learning environment. Faculties of Education have recently stressed the appointment of faculty members with an orientation towards research. However, their research activities are generally hampered by lack of time, facilities and funds. If we can make it possible for them to engage in appropriate types of investigation we may expect an improvement in teacher preparation and consequently an improvement in pupil performance. Funds and facilities are necessary; released time is even more essential. Heavy teaching loads combined with supervision of teaching and assistance to student teachers in lesson planning make research difficult. Funding for research must consider the special problems faced by Faculties of Education, which could and should be to the teaching profession what Schools of Medicine are to the medical profession. Members of Faculties of Education should have time to consult with the profession to help plan, initiate, and conduct research which would lead to the improvement of learning.

A massive increase in funds should be made available to the proposed Learning and Training Research Council for allocation to universities for this purpose.

6. Towards an Expansion and Improvement of University Research in Canada:

Recommendations of the Committee

It is evident from the foregoing discussion that the federal government has a particular responsibility to encourage and sponsor research in Canada. It is also clear that the present level of funding is inadequate, and that there are substantial weaknesses in present organizational structures and policies relating to research funding. Failure to deal with these problems will have serious economic, social and cultural consequences.

(i) In view of the importance of research to Canada as a whole it is recommended that the federal government continue to support university research by means of direct grants to the universities and to individual faculty members.

(ii) It is recommended further that the federal government expand substantially its support of research, particularly at the universities. A minimum rate of increases of funding of 20 per cent per annum in the physical sciences seems appropriate for the next 10 years at least. A substantially greater rate of increase is required in the social sciences and the humanities. In addition it is recommended that the government advertise and emphasize the extent of tax-reduction amenities offered to industry in return for industrial support of university research.

An increased level of research funding will not be enough by itself. Changes are needed in the relative proportions allocated to the physical and social sciences on the one hand, and to government agency "in house" research and university research on the other.

(iii) It is recommended that greatly increased emphasis be placed on social science research while continuing to increase funding in the physical sciences, and that a much greater share of the total research effort be undertaken at the universities.

The greatest benefits from increased funding can only be obtained through modifications of the existing organizational arrangements and through changes in funding policies.

(iv) It is recommended that a Research Council of Canada be established to assist in the formulation of research policy for the nation, and to co-ordinate programs and policies of various funding agencies. Such a body would be independent, would include representation from a wide variety of disciplines, various professional interests, and the different regions of Canada, and would have its own Secretariat. It would co-ordinate the activities and draw upon the advice of a number of research councils representing groups of disciplines. These councils might be a Physical Sciences Research Council, consisting of the National Research Council and other agencies funding research in the physical sciences; a Social Sciences Research Council; a Humanities and Fine Arts Research Council, based on that part of the Canada Council which has responsibility for funding university research in the humanities and fine arts; a Health Sciences Research Council; and a Learning and Training Research Council. They would be composed of representatives from the relevant disciplines. They might establish a number of regional research centres across the country where researchers could meet each other and undertake research; these centres would also act as data banks. The various councils would also facilitate publication of journals in the relevant fields, and in particular the Committee would like to see the Canada Council re-examine its policy of refusing support to journals and magazines during their first two years.

(v) It is further recommended that present policies relating to funding of research be modified to accommodate the various needs of researchers, such as:

- (a) The provision of grants to universities along the lines suggested in the Bladen Commission report, one function of which might be to facilitate relief of teaching loads, thus permitting research to be undertaken on a continuous basis rather than intermittently;

- (b) the provision of federal grants to universities to ensure that those actively engaged in research are free to undertake that research during the summer;
- (c) the provision of stipends and travel funds to facilitate taking maximum advantage of sabbatical leave;
- (d) long term grants (up to 3 years) to enable more significant research projects and training programs to be undertaken;
- (e) support of graduate research from the initial stages to the final stages of a student's program, including Masters degree as well as the Ph.D., thus enabling an expansion and strengthening of graduate work in Canadian universities;
- (f) the allocation to the universities of a percentage of all grants to individuals, to cover overhead expenses and to furnish "seed capital" for further university research, not necessarily in the field in which the grant was given;
- (g) the provision of capital grants to enable the construction of buildings and facilities relating to research and training;
- (h) the provision of funds for library expansion on a scale large enough to enable Canadian universities to attain the levels reached elsewhere;
- (i) the improvement of liaison between funding agencies and the universities, including frequent contacts between such agencies and the universities, the participation of university personnel in policy-making relating to funding, and the establishment of panels which ensure full geographical representation.

(vi) It is recommended in addition that arrangements for reviewing applications for research grants be modified. Such modifications might include the following:

- (a) the establishment of certain basic principles, for example, that applications be reviewed by the applicant's peers, and that emphasis be placed on the quality of the researcher as well as on the interest of the project;
- (b) the adoption of more liberal definitions of research in the case of such disciplines as fine arts;
- (c) the establishment of special panels to review proposals which do not conveniently fall into an established area of research, or which are inter-disciplinary in nature;
- (d) the establishment of practices among all fund-granting agencies whereby (1) brochures are published stating clearly the way in which applications are to be submitted, the procedures for reviewing applications, the date for filing of applications for grants, and the date by which an applicant may expect to be notified of the success or failure of his application, (2) unsuccessful applicants are informed of reasons for the rejection of their applications (perhaps in a manner similar to that used by publishers), and (3) when the amount granted is less than that requested, the applicant be informed of those parts of the project which cannot be funded and that reasons be given.

In future policies relating to research funding in Canada particular attention must be paid to the problems of the newer universities.

(vii) It is recommended that research support at the newer universities be increased at a rate substantially higher than at the older universities, for at least the first ten years

following the establishment of graduate programs in various fields. In particular it is recommended that policies be modified to include support for the construction of buildings whose major purpose will be to house research programs, and to enable a reduction in teaching loads.

Attention also needs to be given to the problem of finding new ways to foster learning and training along the lines contemplated by the National Endowment for the Humanities in the United States.

(viii) It is recommended that a special study be undertaken of the research needs in connection with the learning process, curriculum design and small group interaction.

APPENDIX A

University of Victoria

President's Research Support Advisory Committee

Dr. G.W. Bertram,
Professor and Chairman, Department of
Economics (Chairman)

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Associate Professor, Department of
Physics

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Professor and Director, School of Fine Arts

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Associate Professor, Department of
English

Dr. W.R.D. Sewell,
Associate Professor, Departments of
Economics and Geography

Dr. F. Tyler,
Dean, Faculty of Education

Mrs. R.G. Lawrence,
Research Assistant

APPENDIX B

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APPENDIX C

Agencies Contacted for Information

Canada

British Council
Canada Council
Defence Research Board
Humanities Research Council of Canada
Department of Labour
Medical Research Council
Department of National Health and Welfare
National Research Council of Canada
Social Science Research Council of Canada

Great Britain

Agricultural Research Council
Medical Research Council
Natural Environment Research Council
Science Research Council
Social Science Research Council

United States of America

American Council of Learned Societies
Brookings Institution
Carnegie Corporation of New York
Ford Foundation
John Simon Guggenheim Memorial Foundation
National Endowment for the Humanities
National Science Foundation
Resources for the Future, Inc.
Rockefeller Foundation
Social Science Research Council

APPENDIX DPRODUCTIVITY IN THE CANADIAN ECONOMY

The last few years have unfortunately seen the decline of productivity in Canada measured in terms of real output per person employed. This decline is particularly noticeable in the non-agricultural sector of the economy - mainly in manufacturing. Real output per person employed rose to a rate of growth of about 2% per annum in 1963-64. In the following years it fell to only a rate of about 1% per year in 1965-66 and failed to revive throughout the remainder of 1966.

It is a matter of considerable concern, particularly in the manufacturing sector, where the pace of technological advance is intimately related to the pace of research and development, that Canadian productivity relative to the U.S. has fallen very sharply in the last few years. Real output per person employed in manufacturing reached a rate above 4% in 1963-64 - equal to the achievement of the U.S. However, in the two succeeding years, when the favourable effects of full employment capacity were being exhausted, the growth in real output per person went into decline, ending up in 1965-66 with a growth rate of 1½% per year. In the United States the comparable rate was 3½% per year. In this period of full employment, further growth in real output per employed person was dependent upon advances in productivity which the Canadian economy apparently was incapable of achieving. Failure of productivity to grow has the almost inevitable result of causing labour costs per unit of manufacturing output to rise. The unfortunate effect of this rise in unit costs is to handicap seriously Canada's competitive position in world markets.

The Economic Council of Canada drew attention to this matter in its First Annual Review:

Over the past decade there has been a noteworthy increase in R & D activity in Canadian industry. In recent years the federal government has sought to stimulate further this rate of activity by means of special programmes, including a special income tax incentive scheme, direct assistance programmes administered by the National Research

Council and the Defence Research Board, and a defence-development-sharing programme now administered by the Department of Industry. In addition, a number of provincial governments have established research councils and have instituted new measures. These programmes and policies have helped to bring about the rapid rate of expansion in R & D activity now under way in a growing number of Canadian industries.

While these events have been taking place in Canada, there has been a striking increase in the emphasis placed on R & D by most of the advanced industrial nations of the world. In large measure, this is the outcome of a new realization of the substantial role which is played by technology, new knowledge, innovation and skill in the improvement of productivity and the achievement of economic growth. Nearly all of the principal industrial countries have in recent years stepped up sharply their total investment of resources in R & D to annual rates of increase in the order of 10 to 15 per cent a year.

Total annual expenditures on R & D are now running in the neighbourhood of 3 per cent of Gross National Product in the United States, between 1 and 3 per cent in several European countries and in Japan. The latter country, which for a long time depended very heavily on imported technology, has greatly increased its own efforts and is proposing to expand its investment in R & D during the present decade at a rate twice as fast as the very rapid increase in national production. In the United Kingdom total outlays on R & D were more than doubled over the past six years. Nearly all the advanced industrial countries are planning continued rapid increases over the next several years in their outlays on research and development as a significant feature of their programmes for the promotion of higher productivity and economic growth.

The Director General of the Organization for Economic Co-operation and Development has said: "Indeed, if the OECD member countries are to achieve the collective growth target of 50 per cent in real Gross National Product during the decade 1961-1970 according to their resolution of November, 1961, they will have to call upon every resource which science and technology can provide." If Canada is to realize the high rate of growth needed for a very rapidly expanding labour force and is to achieve the betterment in productivity required for continued improvement in standards of living while remaining competitive in the world, we have all the more reason to call upon the resources of science and technology. We will need to continue to draw very heavily on foreign sources for technology. In many cases this will be the only source, and in many others it will be the cheapest

and quickest way to get it. However, this will not be enough. Canada will also need to expand substantially her own efforts in order to supplement and adapt what is available and in order to take adequate advantage of particular Canadian possibilities. It is necessary to continue to develop better and more intensive methods in the use of Canadian resources, and it is necessary for Canadians to participate adequately in the fastest growing industries."⁽¹⁾

(1) Economic Council of Canada, First Annual Review, Ottawa, Queen's Printer, December 1964, pp. 158-159.

APPENDIX EPRESENT AND PROJECTED LEVELS OF RESEARCHSUPPORT IN CANADA

One of the principal problems faced by the Committee in preparing this brief was the lack of a consolidated review of past and present support of research in Canada. The Committee consulted a wide variety of sources of data on research support and found the information generally fragmentary, and sometimes contradictory. It is very difficult, for example, to obtain reliable estimates of current expenditures on different types of research. In particular, estimates of expenditures on social science research are almost entirely lacking. In an effort to provide some realistic recommendations as to future levels of support, the Committee used what information is presently available on research expenditures. It attempted a projection of future expenditures, based on assumptions about the future rate of growth of the Gross National Product (GNP), and the relationship between GNP and research support. It should be noted that the methodology used was a simple one, and that the possibility exists that there may be some inaccuracies and duplication in the data used. Nevertheless the assumptions underlying the analysis seem to be reasonable, taking into account past experience in Canada and elsewhere.

The Committee estimated that in 1965-1966 the total expenditures on scientific activity in Canada amounted to \$620 million. Such activity includes all federally supported scientific activities (defined by DBS to include expenditures on research and development, scientific data collection and information, scholarships and fellowships, and capital expenditures on research), net industrially supported research and development, net university funded research, non-profit organization supported research, and Canada Council supported research in the humanities and social science research. Present total expenditures on scientific activity in Canada amount to about 1.1 per cent of GNP. This compares with 2 to 3 per cent of GNP spent by other advanced countries on research and development. The definition of scientific activity used by DBS is somewhat broader than

the usual definition of research and development, particularly since it includes scientific data collection as one component. If the latter were excluded, Canadian expenditures on research and development would amount to \$580 million, or just over 1 per cent of GNP in 1965-1966.

Of the estimated total Canadian expenditures on scientific activity (\$620 million), some \$396 million of the funds were provided by the federal government, some \$182 million by industry, about \$24 million by university sources (that is, sources other than funds provided by the federal government), about \$15 million by various non-profit organizations, and some \$3 million by the Canada Council (for supporting research in the humanities and social sciences). The expenditures may also be classified according to physical science research, and research in the social sciences and humanities. It was not possible to determine precisely the allocation between these groups but from the information available to the Committee, it appears that expenditures on social science research and research in the humanities in Canadian universities amounted to little more than \$2 million in 1965-1966. The remainder of the expenditures on research in Canadian universities was presumably accounted for by research funding on the physical sciences. The data available to the Committee did not permit any estimate of expenditures on social science research outside universities but contacts with government agencies and with industries suggest that such expenditures are very small.

Given these estimates of present expenditures on research and development in Canada, at what rates would such expenditures need to increase if Canada is to reach levels of support provided in other advanced countries? It has been assumed for the purposes of this brief that GNP in Canada will increase at an average rate of 6% per annum during the next decade. This assumption seems reasonable in view of the record of Canadian economic growth during the 1960's. It has also been assumed that the nation might aspire to the attainment of (a) a level of support of research and development comparable to that achieved in the United States, namely 3% of GNP or (b) a level of support comparable to that achieved in many other advanced nations, namely 2% of GNP. Further it

has been assumed that the federal government will continue to increase the support of research at at least the rates of increase attained during the past few years. During the period Fiscal 1963 to Fiscal 1966 the federal government increased its support of scientific activity at an average rate of 15% per annum. It seemed reasonable, therefore, for the purposes of this brief to assume a rate of increase of 20% per annum for supporting research beyond 1966.

Figure 1 shows that if total support for scientific activity in Canada is increased at a rate of 20% per annum, it will reach 2% of GNP by 1970 (or \$1.5 billion) or 3% of GNP by 1973 (or \$2.7 billion).

Figure 2 illustrates the past and possible future development of research support in Canadian universities against a framework of research expenditure amounting to 2% of the GNP [growth curve (1)]. Federal expenditure on research and development [growth curve (2)] would attain 2% of GNP by the end of 1976 if they were expanded at a rate of growth of 20% per year from their actual value in 1965-66. Growth curve (3) shows that in the past (1955-56 to 1965-66) the estimated actual expenditures on sponsored or assisted research at Canadian universities did grow at a rate close to 20% per annum. A projection of university research expenditures at 20% per annum is therefore within Canadian capabilities and might be considered a minimum target. By the end of 1976, research expenditures at Canadian universities would then stand at some \$380,000,000, or approximately 4/10 of 1% of projected GNP in 1976. Since no correction has been made for price changes in this brief, this estimate greatly understates the amount of real resources which would be devoted to research.

Federal support for research by grants, contracts, scholarships, fellowships and associates also grew, as shown in growth curve (5), at a rate close to 20% per annum in the period 1955-56 to 1964-65. This curve is consequently projected to 1976 at a 20% per annum growth rate. It is quite apparent from an inspection of growth curves (3), (4) and (5) that Federal support [curve (5)] supplies the main support for total

university research [curve (3)]. In fact, actual research in science and engineering (excluding medical research) at the universities accounted for almost the entire university research effort as is indicated by a comparison of curve (3) and curve (4) through 1964-65. This very narrow gap separating science and engineering research from total university research expenditures [between curve (3) and curve (4)] in these years, while perhaps not quite accurate in that not all support in funding humanities and social science research is included in growth curve (3), does indicate the very slender support for research in the humanities and social sciences. It should be noted in Figure 2 that the wide gap between the projected portion of growth curves (3) and (4) is explained, not by increasing support to the social sciences and humanities, but merely because the projection for expenditures on university research in science and engineering begins one year earlier than the recent information available for all university research expenditures.

The reason why curve (4) lies above curve (5) is also worthy of note. Support for science and engineering research, while mainly coming from Federal government agencies, is not limited to this type of funding. Fairly significant research support for the physical sciences has also been available from private sources including foundations and alumni.

The Committee preparing this brief has not been able to assemble any data concerning research expenditures in the social sciences or humanities comparable to that available for the physical sciences and this, unfortunately, appears to reflect the lack of research support in these fields in Canada. One significant set of statistics, available however only for one year, is found in the Bladen report, Financing Higher Education in Canada. Of a total of \$28,446,000 made available for research in Canadian universities in 1964-65, only \$194,000 or 7/10 of 1% was provided for the social sciences. Apparently, no funding was made available from Federal government departments to the humanities in Canadian universities in that year.

Figure 2 indicates in curve (7) the grants and awards authorized by the Canada Council for the two separate periods of 1958-63 and fiscal years 1966 and 1967. It is significant that the funding provided by the Canada Council increased dramatically in the latter period through substantial new Federal support to the Council, to reach a total of \$9.6 million in fiscal 1967. Even so, this new achievement of the Canada Council represents less than 2% of the total Canadian expenditure on scientific activity.

It is not possible to determine from the 1966-67 Annual Report of the Canada Council what the major divisions of expenditure actually were. However, the Canada Year Book for 1967 does provide an analysis for the year ending March, 1966, showing that the Council expended \$2,856,000 for the humanities and social sciences and \$3,444,000 for the arts--therefore providing 55% of Council resources for the arts and 45% for the social sciences and humanities.

Based on such information as is available, the Committee estimated that present support of social science research in Canadian universities amounts to less than \$2,000,000 from all sources. In view of the small magnitude of this support and the demonstrated need for a much greater research effort in this connection, it is clear that support for such research must be increased substantially and at a much greater rate than the 20% per annum rate suggested for the physical sciences. The Committee is conscious of the problems of accelerating research. Providing additional funds for research in the social sciences and humanities should be regarded as the first critical step to be accompanied by measures at the universities which will provide researchers with the necessary time and facilities to undertake studies.

APPENDIX FMAIN STATISTICAL SOURCES FOR FIGURES 2 AND 3

- Dominion Bureau of Statistics, Federal Government Expenditures on Scientific Activities, fiscal year 1964-65.
- Dominion Bureau of Statistics, Industrial Research--Development Expenditures in Canada, 1963.
- Dominion Bureau of Statistics, Canadian Universities, Income and Expenditure, 1961-62, 1962-63, 1963-64 and 1964-65 publications and advance releases from Dominion Bureau of Statistics for 1965-66.
- Dominion Bureau of Statistics, Expenditures on Scientific Activities by Non-Profit Organizations, 1965.
- Report of a Commission to the Association of Universities and Colleges of Canada. Financing Higher Education in Canada. Tables 10 and 11.
- National Research Council, Expenditures on Research in Science and Engineering at Canadian Universities, Report of a Survey for the Forecasting Committee of the National Research Council, Ottawa, 1966, Tables I and IX.

TABLE 1
Percentage of GNP devoted to Research and
Development in Various Countries, 1962

U. S. A. (1)	3.1
Soviet Union (1)	2.2
U. K. (1)	2.2
Netherlands (1)	1.8
France (1)	1.5
Germany (1)	1.3
Canada (2)	0.9

Sources: (1) OECD, The Research and Development Effort, Paris, 1965 p. 71.

(2) Canadian Association of Physicists, Physics in Canada, Vol. 21, No. 3, 1967, p. 39.

PRESIDENT'S RESEARCH SUPPORT ADVISORY COMMITTEE

PLEASE BE AS BRIEF AND SPECIFIC AS POSSIBLE AND PROVIDE ANY ADDITIONAL VIEWS OR INFORMATION YOU FEEL WOULD BE VALUABLE TO THE COMMITTEE.

***RESEARCH - Research, Scholarship, Creative Work**

- 1. What proportion of the members in your Department are engaged in
 - a) funded research*?
 - b) non-funded research on specific projects?

- 2. In your Department, what reasonable proportion of the individual faculty member's effort should be spent on research programmes?

- 3. If more research funds were available, in what ways would this affect your Departmental programme? e.g., developing graduate studies, changing the orientation of the Department, broadening the range of studies?

- 4. What proportion of research by the members of your Department
 - a) can be undertaken locally?
 - b) must be undertaken elsewhere in Canada?

WHY?

- c) must be undertaken outside of Canada?

WHY?

5. To what extent does an expansion of research in your Department (and/or graduate programmes) hinge upon the expansion of library facilities?

6. a) What liaison have members of your Department had with major research funding agencies, e.g. N.R.C., Canada Council, non-governmental research foundations?

b) Have any difficulties been experienced in establishing and/or maintaining contacts with representatives of such agencies?

7. Is research adequately defined by grant-giving bodies, e.g. too widely, too narrowly?

8. a) At what levels should awards or fellowships be given in your discipline:
Undergraduate? _____

Masters? _____

Doctorate? _____

Post-Doctorate? _____

b) What proportion of awards and fellowships in your discipline should go to each of these levels?

(a) Undergraduate
WHY? _____

(b) Masters
WHY? _____

(c) Doctorate
WHY? _____

(d) Post-Doctorate
WHY? _____

9. To whom should research funds be granted in your discipline:

Individuals? _____

Departments? _____

University? _____

10. Do you feel that present procedures of fund granting are adequate in the following respects:

- (a) information on funds available?
- (b) techniques of applying for awards or grants?
- (c) notification of results of application?

11. Once the award has been made, are present requirements for administering funds satisfactory? _____

If not, why not?

12. What conditions should the recipient of a research award have to meet, e.g. :

- (a) be a full-time faculty member?
- (b) have the rights to copyright or patent?
- (c) acknowledgement of awarding agency in publication?
- (d) frequency of submitting progress reports?
- (e) provision for, or use of unexpended funds in a budget period?

13. Should any distinction be made between pure and applied research in your discipline?

14. Are you in favour of members of your Department accepting funds for contract research, as distinct from consulting? _____

15. To what extent is research in this University hampered by the exclusion from federal grants of direct support for buildings, library collections, specialized facilities?

16. Describe those proposals in your Five-Year Plan which are dependent upon research funds from federal agencies.

17. Are you in favour of the establishment of regional research centres in your discipline? _____

President's Research Support Advisory Committee

QUESTIONNAIRE

* RESEARCH - Research, Scholarship, Creative Work

NAME: _____

DEPARTMENT: _____

1. Could you continue or undertake research* in your field without additional financial support other than your salary? Yes No

2. Are you now the recipient of research grants or awards? Yes No

3. List all research grants or awards (including UVIC Research Grants) received since 1960, giving original amount requested and actual amount received. List most recent grant first.

Year Grant Awarded	Granting Agency	Amount Requested	Amount Received	Institution at which Grant Received

4. If you have had any requests for research grants or awards reduced or rejected, what was the Agency's policy with respect to an explanation?

Specify Agency: _____

5. In order of importance (1, 2, 3, . . .) list which of the following are essential in maintaining or increasing your research effort:

	<u>Maintain</u>	<u>Increase</u>
Equipment	()	()
Space	()	()
Travel	()	()
Graduate Students	()	()
Trained Technical Assistants	()	()
Secretarial Help	()	()
Library Resources	()	()
Others (Specify)	()	()
_____	()	()
_____	()	()

(Give the same number in the above rating to those items you consider of equal importance.)

6. Given the existing circumstances, what specific amounts of money do you estimate are necessary during the next year (a) to maintain and (b) to increase your research effort?

	a) <u>Maintain</u>	b) <u>Increase</u>
Equipment	\$ _____	\$ _____
Space	\$ _____	\$ _____
Travel	\$ _____	\$ _____
Graduate Students	\$ _____	\$ _____
Trained Technical Assistants	\$ _____	\$ _____
Secretarial Help	\$ _____	\$ _____
Library Resources	\$ _____	\$ _____
Others (Specify)	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
TOTAL	\$ _____	\$ _____

7 a) If the most pressing obstacles to your research at this university could be overcome, what kind of annual budget would you propose for your research project(s).

b) Briefly indicate the nature of these projects.

8. Has your research been jeopardized because grants are awarded on an annual basis? Yes No

Which kinds of projects would benefit from continuing grants, and what time period would be acceptable?

Time: _____

Time: _____

Time: _____

9. Are present methods of administering grants satisfactory, e.g. time required for accounting and other paper work? Yes No
If not, why not? _____

10. The Committee would appreciate any further direction in preparing this Brief.

TABLE 4

REVIEW OF STATUS, PROBLEMS AND NEEDS OF FACULTY RESEARCH:
DEPARTMENTAL QUESTIONNAIRES

	FINE ARTS			HUMANITIES				SCIENCE						SOCIAL SCIENCE				
	Art	Music	Theatre	Classics	English	History	Ling. & Med. Lang.	Philos.	Biochem.	Biology	Chem.	Math.	Physics	Anthro. & Soc.	Econ.	Geog.	Pol. Science	Psych.
1. Proportion of faculty engaged in: a) Funded research (per cent)	-	-	0	20	4	50	10	0	100	100	99	0	100	25	60	50	80	100
b) Non-funded research (per cent)	100	100	100	80	50	50	30	100	-	100	0	50	-	75	25	10	100	-
2. Reasonable proportion of time devoted to research (per cent)	30	33 1/3	33 1/3	30	33-50	25	25	33 1/3	5	5	50	30	50	30-40	33 1/3	33 1/3	25	40
3. Effect of increased research funds on Departmental programme a) Graduate studies increased	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	-
b) Changed orientation of Dept.	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	-
c) Broadened range of studies	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	-
4. Proportion of research which: a) Can be undertaken locally (per cent)				30	33(60)	20	X	20-30	80	100	100	95	4	100	70	50-60	60	100
b) Must be undertaken elsewhere in Canada		0		20	33(10)	20	X	-	15	-	5	-	-	25-30	15	25-50	20	-
c) Must be undertaken outside Canada (per cent)	100			50	33(30)	60	X	70-80	5	-	0	-	-	25	15	25	25	-
5. Dependence on library expansion a) Yes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
b) No																		X
6. Difficulties experienced in liaison with Canada Council (i) Yes				X	X	X	X	X										
(ii) No		X	X	X	X	X	X	X										
(i) Yes									X	X	X	X	X					X
(ii) No																		X
c) Non-governmental agencies (i) Yes			X				X						X					X
(ii) No																		X
7. Appropriate proportion of funds to: a) Undergraduates (per cent)	0	0	50	-	-	50	0	-	5	10	10	10	-	0	0	5	10	-
b) Masters (per cent)	30	10		-	X	50	0	-	15	40	50	20	-	-	-	17	30	-
c) Doctorate (per cent)	70	30		-	-	-	50	-	10	40	30	50	-	-	-	30	50	-
d) Post-doctorate (per cent)	0	60		-	X	-	50	-	0	15	10	20	-	-	50	10	-	-
8. Grants should be given to: a) Individuals	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
b) Departments			X	X	X	X	X	X										X
c) Universities			X	X	X	X	X	X										X

* Qualified response given.

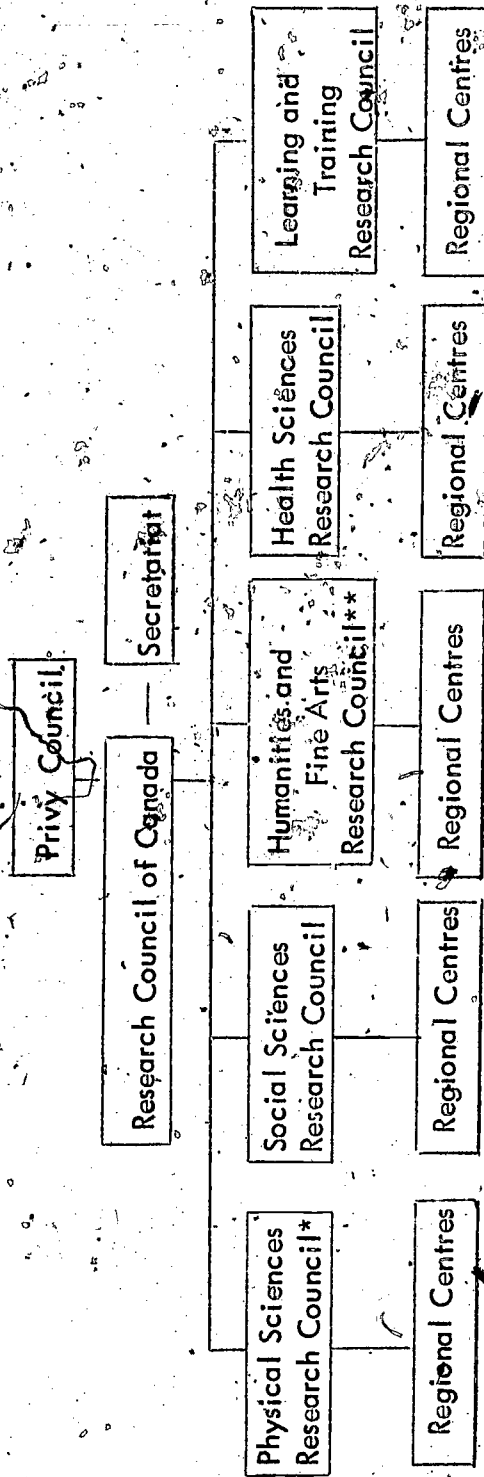
TABLE 3
 REVIEW OF STATUS, PROBLEMS AND NEEDS OF FACULTY RESEARCH:
 INDIVIDUAL QUESTIONNAIRES

	FINE ARTS			ED.		HUMANITIES							SCIENCE						SOCIAL SCIENCE			
	Music	Theatre	ED.	Classics	English	History	Ling.	Mod. Lang.	Philos.	Bacter.	Biology	Chem.	Math.	Physics	Anthro. & Soc.	Econ.	Geog.	Pol. Science	Psych.			
1. Number of faculty members	5	4	38	5	46	11	5	32	4	2	15	13	22	15	8	6	8	5	9			
			9	1		4		13			1		3	4		3						
2. Number of returns	4	4	27	6	29	9	5	21	3	2	15	13	15	15	6	6	8	4	8			
3. Research possible without funding in addition to salary																						
Yes	1	2	2	3	18	1	1	12	3	2	2	1	13	3	1	5	3	2	0			
No	3	2	20	3	11	8	3	9	0	0	13	12	1	12	3	1	4	2	6			
4. Now receiving grants or a variety																						
Yes	1	0	13	3	2	5	2	0	0	2	15	12	2	11	4	1	4	4	6			
No	3	3	13	3	27	4	3	21	3	0	0	1	13	4	2	5	4	0	1			
5. Number of grants since 1960	10	1	39	12	42	19	16	23	-	19	107	94	6	71	14	17	23	14	23			
6. Total value of grants since 1960 (1000's of dollars)	18.3	2.61	26.6	13.5	52.5	31	219.4	19.46	-	101	332.8	266.5	58.9	364	239.5	99.6	139.7	21	87.2			
7. Relative importance of factors involved in increasing research effort (rating based on votes given to various factors)	2	2	7	3	5	6	1	8			2	2	7	2	7	7	6	6	3			
	3	3	6		8	7	2	5			1	3	3	3	8	8	8	5	7			
	4	2	3	1	2	1	6	3	4		6	6	3	5	2	5	3	2	5			
	8	7	2	6	6	3	3	7	5	2	4	1	5	1	3	2	2	3	1			
	5	5	5	2	7	4	4	6			5	4	6	4	1	6	1	2	2			
	6	3	8		4	5	5	4	3		7	7	4	7	4	3	4	1	6			
	7	1	4		1	2	7	1	2		3	5	2	6	6	4	5	4	4			
	1		1		3			2	1		8	8	1	8	5	1	7					
8. Money needed to increase research effort - average per faculty member in department (1000's of dollars)	3	7.5	1.3	.6	.65		2				30.5	26		29.5	.3	5	5		5.35			
		10			.1						6.5	36.35		16			.5		10			
	2.7	.92	.6	3.3	2.1	1.7	1	2.75	1.5		.8	.8	1	.65	2.45	3	1.05	3.5	.65			
			2.5				7.2				7.15	11	1.75	9.15	4.8	.5	8.25	.6	1.8			
	.6	5	3.1	1	.5	4	5.5	.8			8	6	4.25	6.25	3		.6		7.7			
	2	2.25	1.6	1.8	1.4		.35	4	2.04		1.1	1.9	.1	1.5	2.15	.5	1.75	1	2.1			
	2	1	1	8.5	1.55	5.5	.5	1.5	3.75		2.7	.4	.2	.75	.3	2.5	2.25		1			
			4						3						3							
9. Desirable annual budget - average per faculty member in department (1000's of dollars)	3.75	1.05	7.65	1.75	12	3.5	10.9	1.65	3	3	22.5	24	1.5	52	12	5.5	20.15	3.4	2			
10. Desirable time period for grants - average per faculty member in department (years)	3	6	3	.3	2	2	3	4	-		6	6	3	4	2	4	2	2	2			

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FIGURE 1

Possible Re-organization of Federal Research Support



* consisting of the National Research Council and other agencies funding university research in the physical sciences.

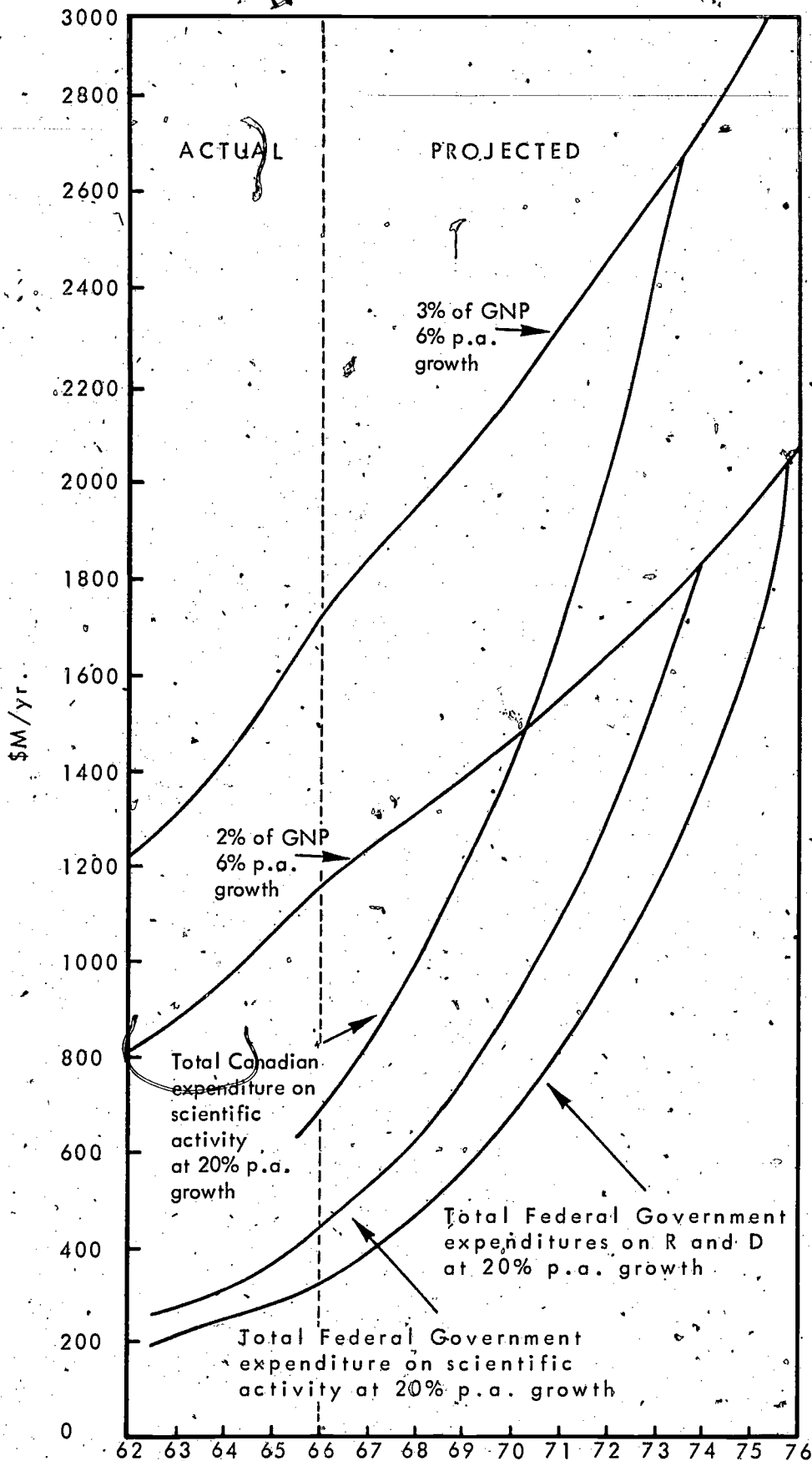
** based on that part of the Canada Council which has responsibility for funding university research in the humanities and fine arts.

Figure 2

CANADIAN EXPENDITURES ON SCIENTIFIC ACTIVITY

1962-66 ACTUAL

1966-76 PROJECTED

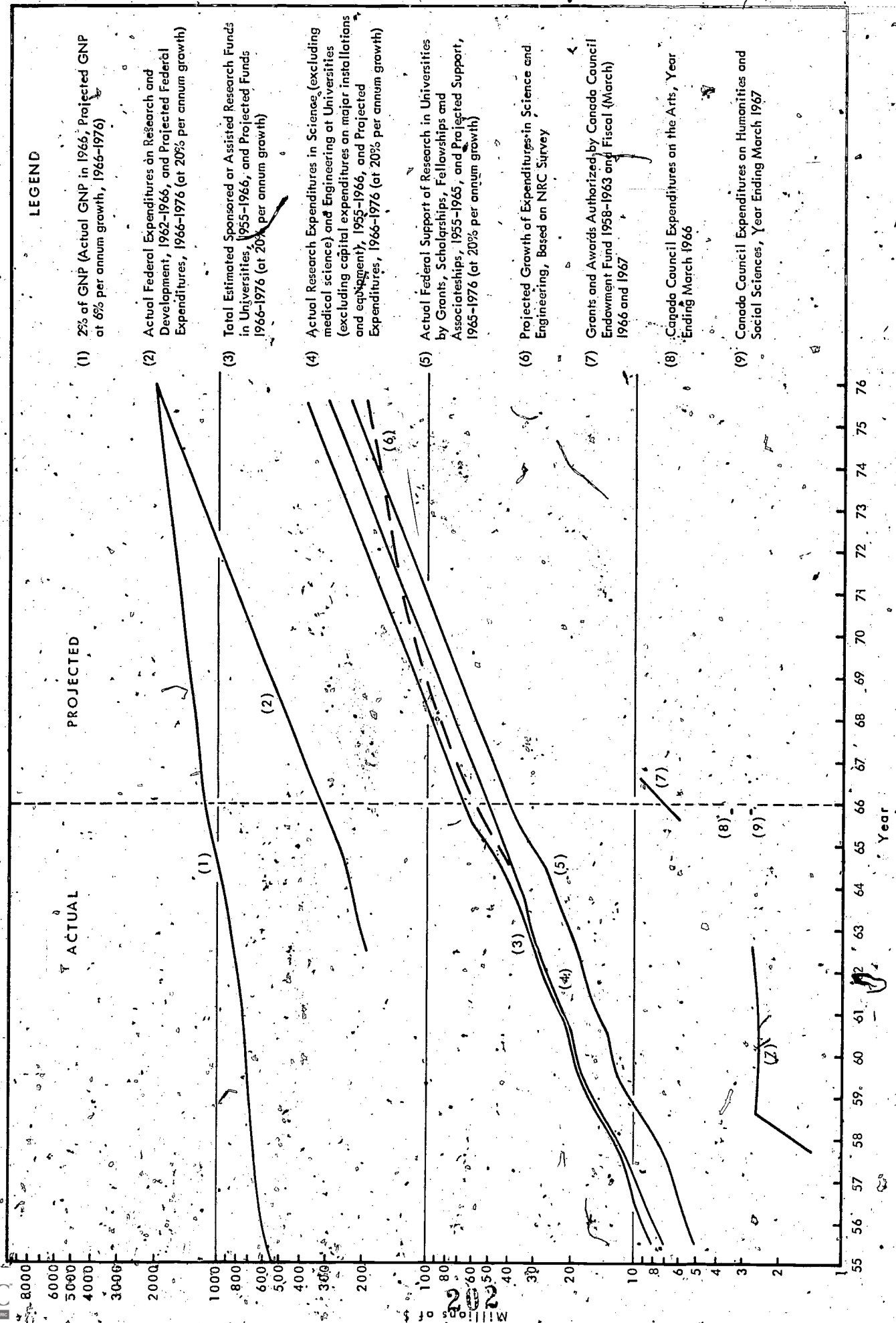


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SOURCE: See Appendix F



FEDERAL AND OTHER SUPPORT OF RESEARCH AT UNIVERSITIES IN CANADA 1955-66 ACTUAL 1966-76 PROJECTED



SOURCES: See Appendix F



UNIVERSITY OF VICTORIA
VICTORIA, BRITISH COLUMBIA

April 17, 1969.

Dean R.T. Wallace,
Acting President,
University of Victoria.

Dear Acting President Wallace:

The request by the Special Committee on Science Policy of the Senate of Canada for briefs on the science policy of the Federal Government has been studied at the University of Victoria by your Committee. As you know, your Committee on Research Support prepared in late 1967 a brief for presentation to the Science Council of Canada's Committee of Enquiry into the Support of Research at Universities.

Although this brief was primarily directed to research in universities, your Committee has felt that it is of sufficient pertinence to the Senate's investigation to warrant its transmission to the Honourable Maurice Lamontagne. A copy is therefore enclosed.

General Recommendations:

We wish to draw particular attention of the Honourable Maurice Lamontagne's Committee to the summary section of the brief (pages 19-23). Although the recommendations contained therein should be read in the context of the text which precedes them and of the appendixes which follow, we have for your convenience provided a summary of the most pertinent recommendations from the brief as an attachment to this letter.

Additional Recommendations:

In considering more specifically the terms of reference of the Special Committee on Science Policy of the Senate, our Committee wishes to bring to their attention the following additional recommendations:

1. The Government of Canada, in formulating any research policy for the country, should in addition to those areas of applied research, provide generous support for fundamental research, to be carried out in Canadian universities. Such support should be free of any restrictive direction by the government as to areas which it considered eligible, since major breakthroughs may come about in unexpected areas of investigation.
2. The Government of Canada should, through whatever structure it develops to coordinate research activities and policies, make a definite attempt to identify particularly Canadian problems where research is required (e.g. communications in an auroral area) and ensure their proper funding.

3. The Government of Canada should encourage industrial firms in Canada to devote a more substantial portion of their budgets to research (perhaps through tax relief mechanisms) and should require foreign firms with Canadian subsidiaries to spend on research in Canada amounts proportionate to those spent in the parent country; in addition, the Government of Canada might well undertake to correlate information about research capabilities in Canada and make such information available to Canadian industry.
4. The Government of Canada should, as a matter of policy, encourage the development in Canada of experts in as many fields as possible, who could be called on for authoritative advice in matters of regional importance (e.g. the implications, economic and otherwise, of the extensive new coal mining operations in eastern British Columbia), national importance (e.g. the continental use of Canadian water resources), and, in line with Canada's probable future rôle as an impartial voice in the world affairs, international importance (e.g. the detection of underground nuclear explosions).
5. The Government of Canada, in formulating its science policy, should ensure that all possible means of increasing the research effort are considered. Specifically, provision should be made for supporting the unestablished scholar, the unusual research topic, and the small institution as well as supporting well-known researchers, conventional research topics and the well-established universities.

All of which is respectfully submitted on behalf of the University of
Victoria.

Sincerely yours,

PRESIDENT'S RESEARCH SUPPORT ADVISORY
COMMITTEE,

G.W. Bertram, Chairman.

/df

Encls.

Members of Committee:

Dr. J.M. Dewey, Associate Professor,
Department of Physics.

Professor P. Garvie, Professor & Director,
School of Fine Arts.

Mr. D.W. Halliwell, University Librarian.

Dr. B.O. Kurth, Associate Professor,
Department of English.

Dr. S.A. Ryce, Professor,
Department of Chemistry.

Dr. W.R.D. Sewell, Associate Professor,
Departments of Economics & Geography.

Dr. F. Tyler, Dean,
Faculty of Education.

Dr. G.W. Bertram, Professor & Chairman,
Department of Economics.
(Chairman)

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Report to the President
of the President's Research Support Advisory Committee

In reply to your request that this Committee consider policy concerning the many aspects of research at the University of Victoria, the following recommendations are submitted for your consideration.

Recommendation 1 - All members of the Committee are convinced of the importance of the function of research at a university, indeed, by definition the university is a teaching and research institution. The changes in the character of the university which place a further emphasis on research activity include the following: (a) the development of graduate programmes (b) the developing recognition of the University of Victoria as an institution involved in scholarly research and (c) recognition in the Tenure Document of the important place of research in promotion and tenure. The fraction of the University operating budget used in support of faculty research amounted to 1.623% in 1966-67 and fell below this figure in the last two years (see enclosed Table 1). The Committee recommends that a magnitude on the order of two per cent of the operating budget of the University should be set aside for direct research funding to faculty members.

Recommendation 2 - The Committee recommends that a University officer be assigned the duties of research coordination at this University. This officer, who might well have the rank of a dean would be advised by a President's University Research Committee on matters of research policy. His duties would be (a) development of research as an integral function of the University (b) effective allocation of research resources (c) provide an information bureau on sources of research financing (d) act as a liaison officer with research organizations and foundations when necessary. (e) coordinate the library and computer facilities as they affect research (f) provide an annual research report for the University of Victoria to be available as public information.

Recommendation 3 - The Committee recommends (a) that a new set of general principles be established for the allocation of research funds from the operating budget of the University and (b) that an appropriate President's Research Support Committee be appointed to undertake this assignment. The following problems are now apparent: (a) as of 1968-69, 63% of the research budget financed by the University went to the sciences; 12.1% went to the Faculty of Education; 24.9%

went to the Faculty of Arts including the Faculty of Fine Arts (see Table 2). The distribution of faculty in the University is not in proportion to this distribution of research funding and certain problems have therefore arisen. While the funding of research operating expenditures should be more in proportion to the distribution of the faculty by departments, there are particular problems in research funding of capital expenditures. It is recognized that research financing in some departments involves much larger capital expenditures than other departments. (b) the departments of the University are presently insufficiently involved in the allocation of research funding. At present, the department head signs the application for research funding to the University Committee on Research, Leave and Travel. The result is frequently an ad hoc judgment on the research proposal rather than a careful weighting of the proposal's priority. The Committee suggests that there should be department research committees (or in some cases a School Committee) which examine all applications to the University funds granting committee with recommendations which can assist in the efficient rationing of University research support. (c) the University Committee on Research, Leave and Travel has an increasingly difficult problem in meeting policy issues. This committee therefore should be able to call upon a President's University Research Support Committee on policy matters. The funding committee should seek advice from an advisory committee of a particular discipline or group of disciplines which can give an expert opinion on the validity and relevance of a particular proposal. (d) in some departments, there may be an advantage in having a department budget allocation for research. This could permit a considerable department influence on the type of research being done and would also permit more long-term research projects. However, there would be disadvantages for some departments in such a policy.

/df

Distribution:

- Acting President Wallace
- Dr. J.M. Dewey - Physics
- Mr. P.M. Garvie - Fine Arts
- Dr. S.A. Ryce - Chemistry
- Mr. D.W. Halliwell - Library
- Dr. W.R.D. Sewell - Geography
- Dr. B.O. Kurth - English
- Dean F.T. Tyler - Education
- Dr. G.W. Bertram - Economics (Chairman)

RESEARCH SUPPORT (Uvic)Budgets and Expenditures for University (Operating only)

1966/67	\$ 6,778,000	\$6,731,401
1967/68	\$ 8,904,000	\$8,926,964
1968/69	\$11,144,000	not available

Budgets and Expenditures for Faculty Research^o Leave & Travel Committee
(Research only)

1966/67	\$110,000	\$ 96,336
1967/68	\$140,000	\$131,325
1968/69	\$150,000	\$150,866 (to March 14, 1969)

Budgets and Expenditures for Social Sciences Research^o Center

1966/67	\$ 20,163	\$ 13,025
1967/68	\$ 22,714	\$ 22,125
1968/69	\$ 23,812	not available

Total Faculty (All Ranks) at University (includes those on leave)

1966/67	242
1967/68	272
1968/69	339

Committee Budget^o as Percent of University Budget

1966/67	1.623
1967/68	1.572
1968/69	1.346

Committee Expenditure as Percent of University Expenditure

1966/67	1.431
1967/68	1.471

Committee Budget in Dollars per Faculty Member

1966/67	\$ 454.54
1967/68	\$ 514.71
1968/69	\$ 442.48

Committee Expenditures in Dollar per Faculty Member

1966/67	\$ 398.06
1967/68	\$ 482.81
1968/69	\$ 445.03

UNIVERSITY OF VICTORIA

FACULTY RESEARCH GRANTS

	<u>1966-67</u>	<u>1967-68</u>	<u>1968-69</u>
EDUCATION	\$ 3,348.00	\$ 15,872.73	\$ 17,894.63
SCIENCES			
Bacteriology & Biochemistry			2,825.00
Biology	16,296.53	15,468.34	22,251.90
Chemistry	24,648.00	37,556.25	38,797.00
Mathematics			4,466.00
Physics	18,040.00	27,829.50	25,343.00
			<u>93,682.90</u>
ARTS			
Anthropology & Sociology	4,681.60	2,915.00	5,090.00
Classics	1,592.10	1,694.40	3,019.40
Economics			4,171.30
Economics & Political Science	4,590.00	3,918.70	
English		500.00	3,123.00
Fine Arts		600.00	7,181.90
French Language & Literature			525.00
Geography	3,323.60	2,634.20	3,608.05
Germanic Languages & Literature			840.00
History	6,455.00	3,878.37	1,717.56
Linguistics	6,000.00	7,500.00	2,000.00
Modern Languages		175.00	
Political Science			2,145.00
Psychology	7,360.94	10,782.60	3,409.00
Slavonic & Oriental Studies			225.00
			<u>37,055.21</u>
	<u>\$ 96,335.77</u>	<u>\$131,325.09</u>	<u>\$148,632.74</u>

Total allocated to March 5, 1969:

Research Grants Allocated subsequent to March 5, 1969:

Chemistry	\$ 953.50	\$ 2,233.50
Geography	400.00	\$150,866.24
History	500.00	
Physics	380.00	
	<u>\$2,233.50</u>	

APPENDIX J

Research Funds Allocation: 1968 to 1973

ALLOCATION OF FUNDS FROM PRESIDENT'S COMMITTEE ON FACULTY RESEARCH, LEAVE AND TRAVEL

R E S E A R C H

1968-69 to 1972-73

BUDGET ALLOCATION:	\$175,000.00	\$184,000.00	\$190,000.00	\$166,000.00	\$150,000.00	Total for past 5 years
	1972-73	1971-72	1970-71	1969-70	1968-69	
Anthropology and Sociology	7,535.00 (9)	11,720.00 (10)	12,000.80 (11)	5,200.98 (7)	5,090.00 (6)	\$ 41,546.78
Bacteriology and Biochemistry	1,800.00 (1)	6,680.00 (3)	6,800.00 (4)	3,775.00 (2)	2,825.00 (1)	21,880.00
Biology	20,140.00* (12)	17,012.00 (12)	24,434.60 (13)	22,044.87 (15)	22,251.90 (12)	105,883.37
Chemistry	27,130.00* (16)	33,440.00 (16)	28,185.10 (19)	28,477.40 (16)	39,750.50 (16)	156,983.00
Classics	6,000.00 (1)	600.00 (1)	-	2,096.38 (3)	3,019.40 (3)	11,715.78
Economics	3,100.00 (4)	2,114.00 (3)	4,422.75 (2)	3,969.00 (4)	4,171.30 (3)	17,777.05
Education Faculty	20,885.00 (21)	19,345.00 (22)	21,271.35 (13)	26,330.12 (25)	17,894.63 (15)	105,726.10
English	9,960.00* (13)	7,452.25 (17)	5,451.50 (15)	7,613.63 (16)	3,123.00 (8)	33,600.38
Fine Arts Faculty	7,203.00	10,306.00	9,493.41	6,789.00	7,181.90	40,973.33
- History in Art	6,423.00 (4)	2,300.00 (3)	1,950.00 (2)	1,317.00 (2)	5,355.90	
- Music	780.00 (1)	2,859.00 (4)	2,515.41 (3)	1,521.00 (3)	1,147.00	
- Theatre	-	647.00 (1)	528.00 (1)	-	679.00	
- Visual Arts	-	4,500.00 (2)	4,500.00 (2)	3,951.00 (3)	-	
French Language	600.00 (1)	1,477.50 (2)	824.50 (2)	-	525.00 (2)	3,427.00
Geography	6,660.00* (6)	4,501.00 (5)	8,046.00 (6)	3,840.00 (5)	4,098.05 (4)	27,055.05
Germanic Languages	2,200.00 (3)	225.00 (1)	850.00 (2)	1,780.00 (3)	840.00 (2)	5,895.00
Hispanic & Italian Studies	-	620.00 (1)	1,166.00 (1)	-	-	1,786.00
History	8,600.00 (7)	11,253.00 (10)	4,656.00 (7)	4,829.79 (6)	2,217.56 (6)	31,556.35
Linguistics	1,868.00 (2)	4,750.00 (4)	6,550.00 (3)	5,618.60 (7)	2,000.00 (1)	20,786.60
Mathematics	6,200.00 (4)	11,100.00 (7)	10,990.00 (6)	8,486.25 (6)	4,466.00 (4)	41,242.25
Philosophy	2,110.00 (2)	941.44 (3)	-	-	-	3,051.44
Physics	30,400.00* (21)	31,639.00 (16)	21,148.00 (19)	20,593.00 (11)	25,723.00 (9)	129,503.00
Political Science	3,500.00 (3)	4,720.00 (3)	1,778.00 (3)	3,793.00 (4)	2,145.00 (3)	15,936.00
Psychology	11,500.00 (7)	11,536.00 (12)	10,771.04 (19)	6,528.52 (7)	3,409.00 (5)	43,744.56
Slavonic & Oriental Studies	700.00 (1)	-	830.00 (1)	-	225.00 (1)	1,755.00
Totals:	\$178,091.00	\$191,432.19	\$179,669.05	\$161,765.56	\$150,866.24	\$861,824.04

Note: * in 1972-73 includes Research Assistants to Heads of Departments
() denotes number of grantees