UNIVERSITY OF DELAWARE
NEWARK. DELAWARE
19711

UNIVERSITY FACULTY SENATE
303 HULLIHEN HALL
PHONE: 302-738-2829

April 23, 1973

MEMORANDUM

TO: All Faculty Members

FROM: R. McDonough, Vice President
         University Faculty Senate

SUBJECT: Regular Senate Meeting, May 7, 1973

In accordance with Section IV, paragraph 6, of the Constitution, the May regular meeting of the University Faculty Senate will be held on Monday, May 7, 1973, at 4 PM, in Room 110, Memorial Hall.

NOTE: All newly-elected Senators should attend this meeting, filled with vigor and ready to do business. Copies of the attachments to this agenda may be obtained by calling Mrs. Erisman in the Senate Office, ext. 2829.

AGENDA

I.   Adoption of the Agenda

II.   Approval of the Minutes of the Regular Meeting of April 2, 1973.

III.   Announcements

IV.   New Business

A. Report from the Nominating Committee, and election of Senate officers. (Nominations may be made from the floor.)

B. Consider a report from the Committee on Committees, nominating new members for appointment to the various committees of the Senate, to assume their duties on September 1, 1973. (Attachment to follow.)

C. Consider a change to the Senate Bylaws, proposed by the Rules Committee, relative to suspension of elected Senators who are absent from all regularly scheduled Senate meetings in one semester. (Committee report attached.)

D. Consider a resolution from the Committee on Graduate Studies relative to termination of the program leading to the degree Doctor of Philosophy in Behavioral Sciences. (Resolution attached.)

E. Consider a report from the Coordinating Committee on Education relative to establishment of a Council on Program Evaluation, which shall advise the Vice President for Academic Affairs on the development and operation of a campus-wide system of program evaluation, as described in the report. (Committee report attached.)

F. Consider a resolution from the Coordinating Committee on Academic Services, requesting the President and Provost to give high priority to relocation and expansion of the University Bookstore in future planning.

G. Such other items as may come before the Senate. (No motion introduced at this time may be acted upon until the next meeting of the Senate.)

Attachments are in the hands of your Senators. Distribution also includes one copy for each ten faculty members of each department.

RM/pe

Attachments

UNIVERSITY FACULTY SENATE
303 HULL'HEN HALL
PHONE: 302-738-2829

May 3, 1973

MEMORANDUM

TO: University Faculty Senate

FROM: Nominating Committee

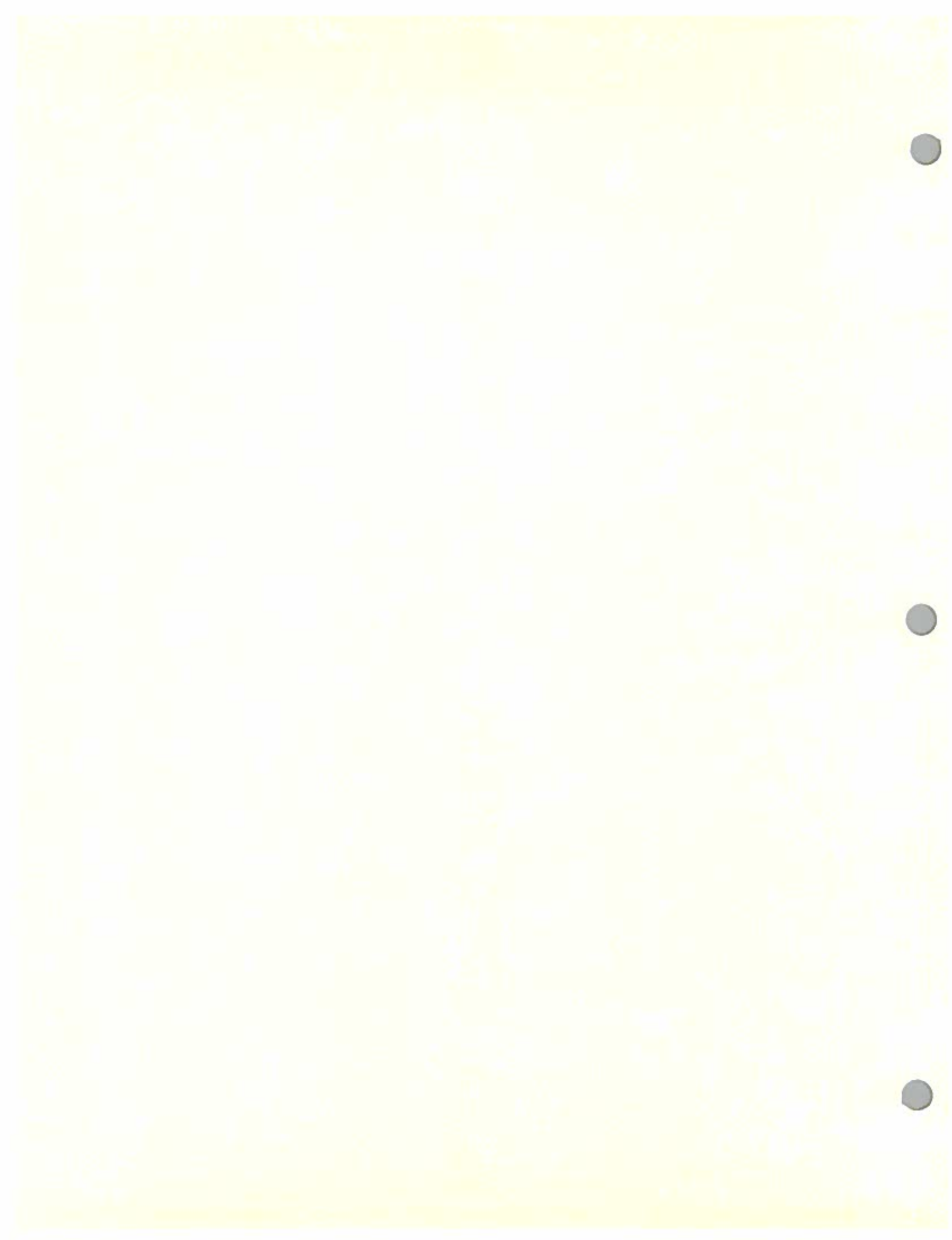SUBJECT: Nominations for Faculty Senate Officers

In accordance with our Bylaws, the following nominations for Senate officers are presented for your consideration.

President   John Wriston
Vice President   W. Bruce Finnie
Secretary   Charles D. Marler

The candidates have agreed to serve if elected.

G. Bonner, Chairman, Nominating Committee
T. Merrill
J. Olson
L. Smith

GRB/dpe

May 3, 1973

MEMORANDUM

TO: Dr. R. McDonough, Vice President
University Faculty Senate

FROM: Gordon R. Bonner, Chairman
Committee on Committees

SUBJECT: Committee Nominations

The Committee on Committees recommends confirmation of the following nominees.

Committee on:

| Committee	Nominees	Committee	Nominees
Academic Ceremonies:	C. Rylander T. Runnels	Educational Innovation and Planning	F. Russell W. Fletcher
Academic Freedom:	J. Beer M. Oglesby		L. Mosberg
Academic Services:	E. Porter E. Gilgenast R. Greenhill	Faculty Welfare and Privileges:	B. Settles B. Shurtleff
Adjunct Academic Affairs:	J. Zikakis E. Adams S. Shin	Faculty-Student Appellate Court:	R. Ewing
Campus Life:	R. Hannah C. Carnahan F. Camfield	Fine Arts and Exhibits:	W. Breslin S. Tanis
Computer:	D. Robinson R. Smith	Graduate Studies:	R. Eckroade J. Leathrum J. Mather
		Instructional Resources:	D. Herr
Cultural Activities and Public Events:	D. Lamb M. Keenze T. Watson	Judicial Policy Board:	E. Cown
		Library:	R. Zaetta D. Klinzing E. Porter
Education:	F. Russell J. Mather R. Greenhill		E. Craven
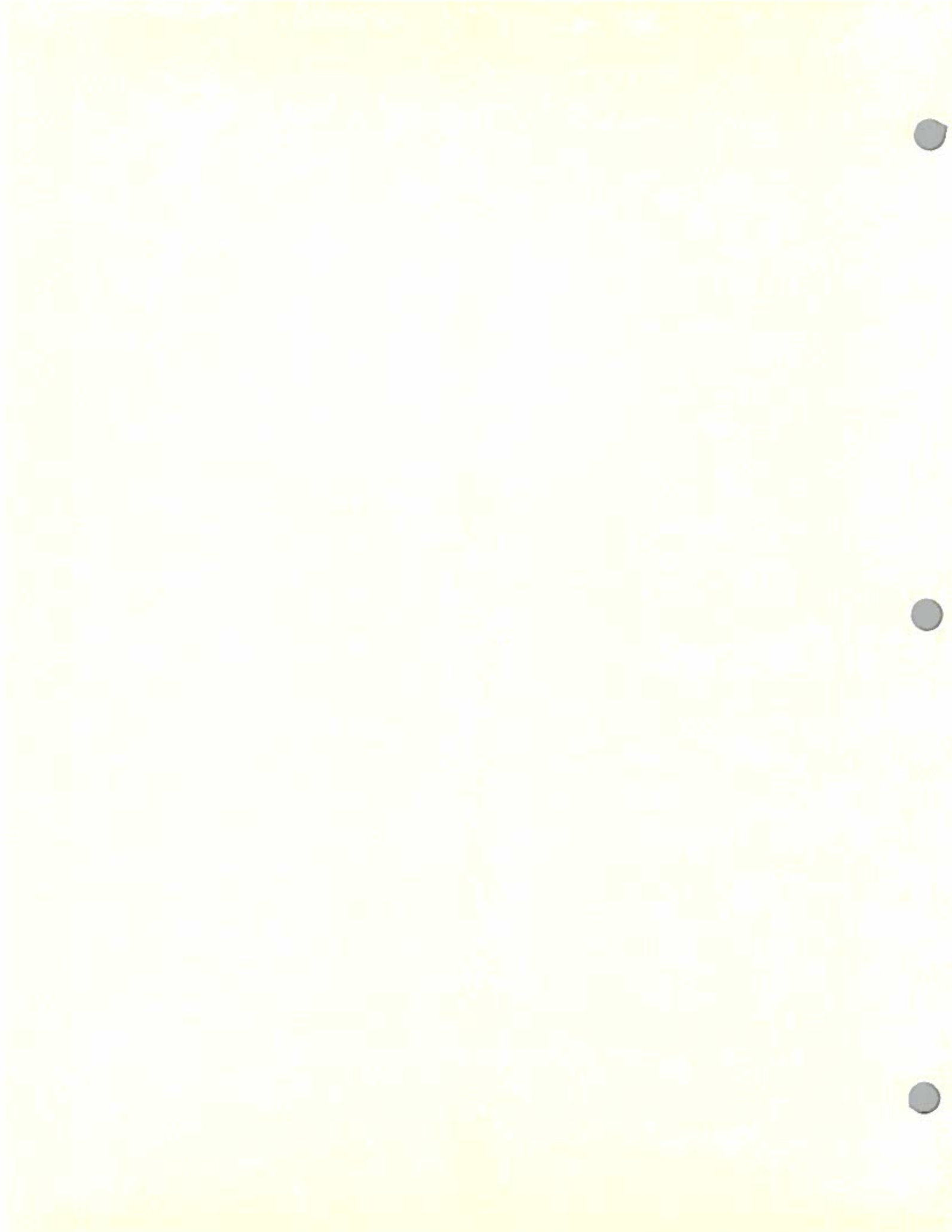
Physical Planning and Utilization:	J. Beavers N. Collins	Undergraduate Admissions and Standing:	T. Parkinson J. DeCaroli A. Van Gelder S. McCabe
Promotions and Tenure:	M. Tripp A. Granda T. Merrill	Undergraduate Studies:	U. Toensmeyer J. Beasley F. Smith
Research:	G. Tatum H. Kwart R. Wolters J. Schultz	Winterim:	T. Church J. Crouse D. Bauer S. Van Camp
Student and Faculty Honors:	V. Fisher M. Sharnoff A. Billon C. Vukelich J. Van Name D. Kennedy		
Student Life:	M. Anapol E. McCreary		

GRB/dpe
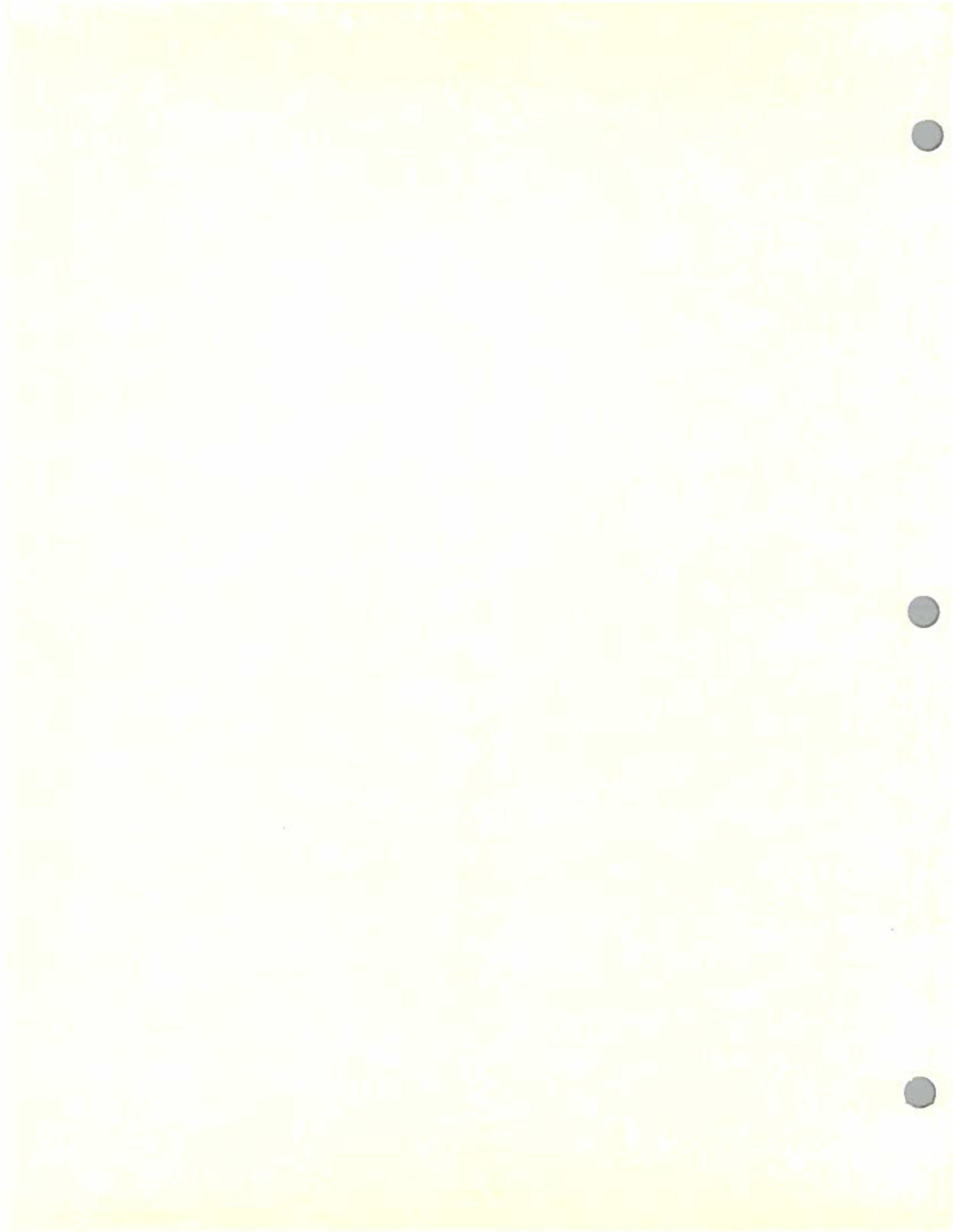
UNIVERSITY FACULTY SENATE

1973-74

Acunha, Julio, Art	2242
Barbieri, Denise, Undergraduate, 219 Russell B	
Barney, Michael, Military Science	2217
Bennett, A. Leroy, Political Science	2355
Bieber, Catherine V., Dean, Home Economics	2301
Bonner, Gordon R., Business Administration	2555
Brown, P. Timothy, Physical Education	2261
Brown, Robert F., Philosophy	2350
Campbell, L. Leon, Vice President for Academic Affairs	2101
Carl, Mary K., Dean, Nursing	2381
Catts, E. Paul, Agricultural Sciences	2526
Chando, Karen, Nursing	1255
Comings, Edward W., Dean, Engineering	2402
Crawford, John S., Art History	2865
Dick, Richard I., Civil Engineering	2431
Donnelley, Lawrence P., Economics	2564
Exline, Ralph V., Psychology	2271
Feely, Theodore M., Jr., Education	2331
Field, Richard, Geography	2295
Finnie, W. Bruce, English	2366
Gaither, William S., Dean, Marine Studies	2841
Glass, Billy P., Geology	2854
Hartman, Gary, Undergraduate, 305 Harrington B	
Hill, Robert N., Physics	2673
Hogenson, Robert, Music	2876
Holsoe, Svend E., Anthropology	2797
Ilyas, Mohammed, Secretarial Studies	2562
Keesey, Ray E., Speech Communications	2777
Kelly, Barbara J., Physical Education	2261
Kingsbury, Herbert B., Mech & Aero Engineering	2423
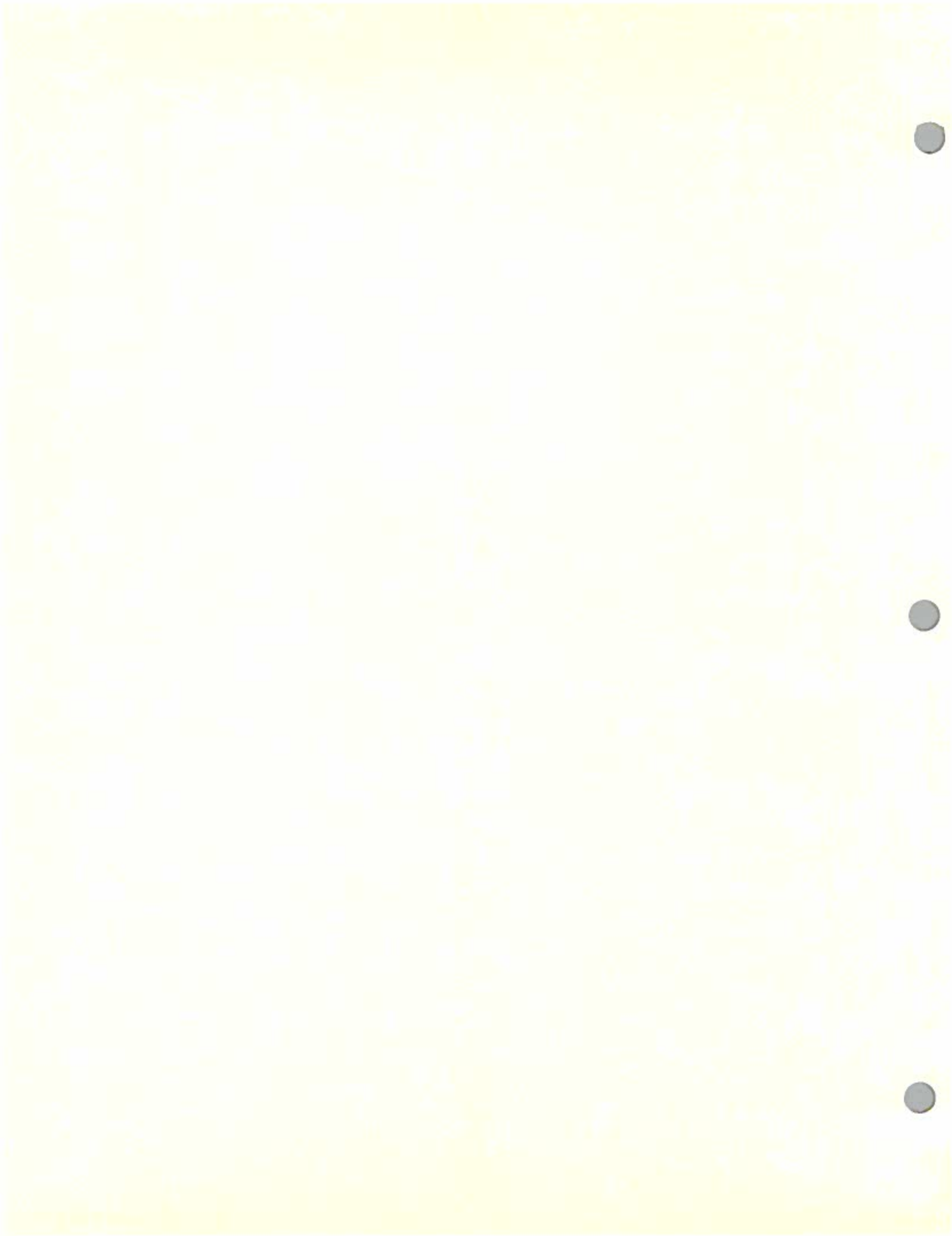
Klinzing, Dennis, Dramatic Arts — 2777

Leathrum, James F., Statistics and Computer Science — 2712

Lippert, Arnold L., Dean, Graduate Studies — 2147

Mangone, Gerard J., Marine Studies — 2842

Marler, Charles D., Education — 2879

McDaniel, William E., Dean, Agriculture — 2501

McDonough, Robert, Electrical Engineering — 2405

McLaughlin, John P., Psychology — 2271

McLuckie, Benjamin, Sociology — 2584

Morehart, Allen L., Plant Science — 2531

Moyne, Ernest, English — 2362

Neale, Daniel C., Dean, Education — 2311

Nicholls, Robert L., Civil Engineering — 2735

Nielsen, Robert M., Mathematics — 2653

Norman, Richard, Dean, Business and Economics — 2551

Nystrom, Richard A., Biological Sciences — 2277

Pikulski, John, Education — 2307

Rasmussen, Arlette I., Home Economics — 2330

Recke, Marjorie, Nursing — 2383

Rosenberry, Edward H., Acting Dean, Arts and Science — 2351

Sammelwitz, Paul H., Agricultural Sciences — 2525

Schweizer, Edward E., Chemistry — 2465

Smith, F. Loren, Psychology — 2271

Taylor, Jonathan E., Marine Studies — 2841

Thompson, Ann S., Home Economics — 2309

Trabant, Edward A., President, University of Delaware — 2111

Williams, Ferd E., Physics — 2661

Wolters, Raymond, History — 2378

Worthen, John E., Vice President for Student Affairs — 2707

Wriston, John, Chemistry — 2462

Zaetta, Robert, Language and Literature — 2452

Total Senate................................... 63
Total Elected Senate.......................... 51
Total Elected Senators needed for quorum..... 26
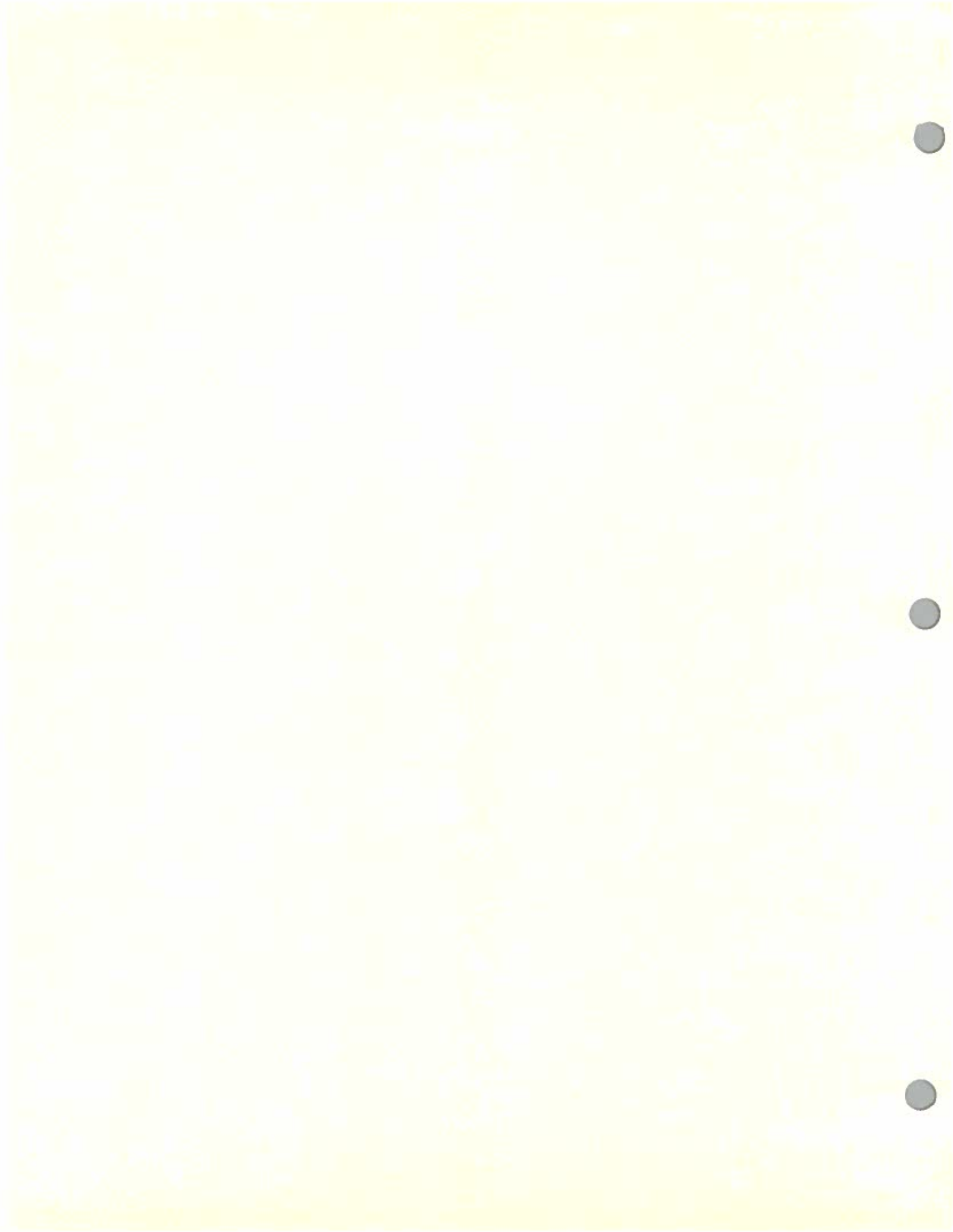
March 14, 1973

<u>MEMORANDUM</u>

TO: Prof. R. McDonough

FROM: John S. Crawford, Chairman
           Rules Committee

The following is a proposed addition to the Bylaws sponsored by the Rules Committee:

"Any elected senator absent from all the regularly scheduled meetings of the Senate in one semester shall be suspended and his unit notified. A suspended member may petition the Senate for reinstatement. If he is reinstated his unit will be notified."

This amendment to the Bylaws would be attached to Section E, "Regular Meetings."

JSC/dpe

RESOLUTION FROM THE COMMITTEE ON GRADUATE STUDIES

Whereas the purposes in graduate training served
initially by the Ph.D. program in Behavioral Sciences are now
served by the Ph.D. programs in Education, Psychology,
Sociology, and Urban Affairs, therefore be it

RESOLVED: That the Ph.D. program in Behavioral Sciences be
terminated upon the completion of, or withdrawal from, that
program of all students presently enrolled in it, and that no
further applications for admission to the program be accepted.

4/23/73

April 23, 1973

MEMORANDUM

TO: Dr. F. Loren Smith, President
        University Faculty Senate

FROM: Edward E. Schweizer, Chairman
        Coordinating Committee on Education

We wish to submit the following which has been unanimously approved by the Coordinating Committee on Education at its meeting of April 23, 1973.

Responding to the call by the Community Design Commission for the "mutual accountability by each part of the University to its constituents" and the "devising of means for making such accounting effective" the Coordinating Committee on Education submitted a Study of Program Evaluation to the University Community (3/20/73). In view of the completion of the Recommendation #1 (i.e. the widespread distribution and the holding of open hearings on the study held April 12, 1973), the University Senate's Coordinating Committee on Education urges the adoption of the following motion with reference to the attached version of "A Study of Program Evaluation."

> The University Senate approves of the establishment of a Council on Program Evaluation (COPE), as described in recommendation #14 of the Study of Program Evaluation distributed on the University of Delaware Campus by the Coordinating Committee on Education, and charges COPE to undertake the duties on the evaluation of Administrative, Public Service and Academic Programs as specified in recommendations 2 through 20, inclusive.

EES/dpe
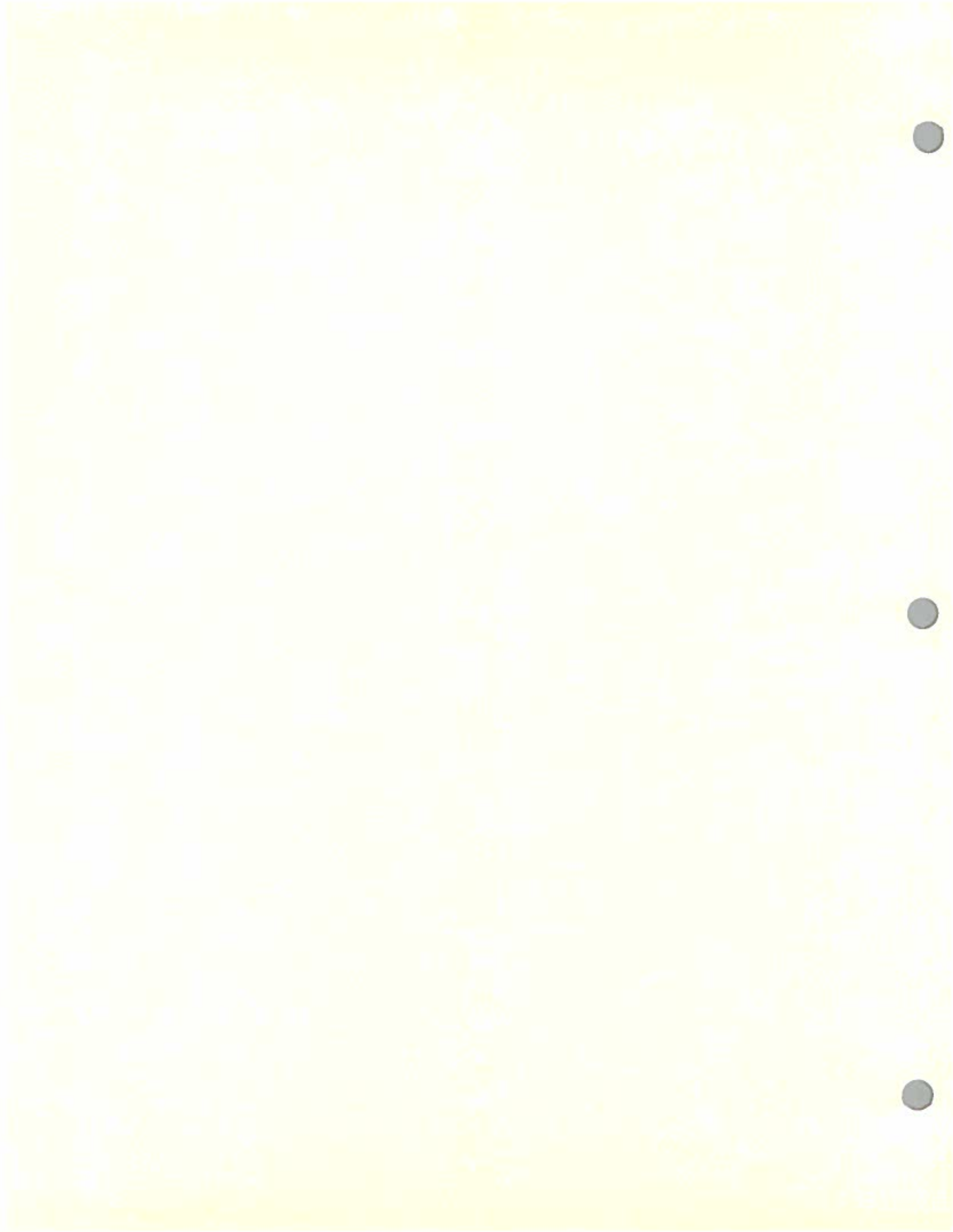
COUNCIL ON PROGRAM EVALUATION
(COPE)

The University Senate approves of the establishment of a Council on Program Evaluation (COPE), as described in recommendation #14 of the Study of Program Evaluation distributed on the University of Delaware Campus by the Coordinating Committee on Education, and charges COPE to undertake the duties on the evaluation of administrative, public service and academic programs as specified in recommendations 2 through 25, inclusive.

(2)   The Vice President for Academic Affairs shall carry out an evaluation on a cyclical, continuing basis, of every program on campus. This evaluation shall be related to continued long-range planning, conducted by the Office of the Vice President for Academic Affairs and designed to sharpen the perceptions of our institutional objectives and to bring them into better focus in the decision making of the campus.

(3)   The evaluation of a program or unit shall be based in part on: (a) the submittal by the program or unit of a statement of its mission; and (b) a critical self-evaluation by the program or unit of its current status, together with specific proposals for improvement of its quality and productivity. These will be assessed in relation to the broad objectives of the campus long-range plan.

(4)   In the review of programs, efforts should be made to include comparative studies of several closely related programs or of a readily isolated factor common to many programs.

(5)   Those associated with a program should be given an opportunity to propose criteria and indicators which they believe to be appropriate for evaluating the program.

(6)   When a unit initiates and carries out an evaluation of one or more of its own programs at least some of any resources released in connection with the evaluation should be reassigned to promote the quality and effectiveness of programs in the unit.

(7) A small number of major criteria, three to five, shall be employed for the evaluation of the academic aspects of a program. Insofar as feasible, these criteria should be independent of one another. It is proposed that the following criteria be employed initially:

   a. Quality of instruction in individual courses and of the instructional program as a whole.

   b. Quality of research, creative activity, scholarly work, service, or of professional performance.

   c. Centrality, i.e. the contribution or importance of the program in question to other campus programs.

   d. Value of the program to society or its uniqueness in the State's program of higher education.

   e. Potential and future expectations.

   The ratings of programs according to each criterion should be summarized on a four-point scale such as Outstanding, Strong, Adequate, and Marginal. The weights to be attached to these criteria, the format in which to present the results of an evaluation and to whom, the extent of supporting analysis and commentary, and the actions appropriate for particular circumstances are important aspects of the evaluations. However, they are best evolved in connection with actual evaluations and should be given high priority at that time.

(8) A set of indicators, numerical insofar as feasible, shall be developed for evaluating a program with respect to each criterion. Preliminary checklists of such indicators are given in the text; they are not listed in order of priority nor are they intended to be complete. The particular indicators employed for a program will be adjusted to match the wide diversity of programs on the campus, with the advice of those responsible for the program as stated in Recommendation (5).

(9) In addition to evaluation with respect to the academic criteria of Recommendation (8), it is essential that programs be examined in terms of their costs and cost-effectiveness. Valid indicators need to be developed for this purpose; several possibilities are suggested.

(10) The Office of the Vice President for Academic Affairs shall be responsible for providing the various administrative units and

program evaluation groups with the statistical information needed
on a systematic, historical basis for effective program evaluation.

(11)   Each individual academic program shall be evaluated in depth at
       least once every five years.

(12)   There should continue to be an annual, limited-depth budgetary
       review of academic programs. However, it should be tied more
       closely and in more detail than at present to the cost-effectiveness
       of the programs. Its objectives should be the improvement of pro-
       grams, the reallocation of resources to meet changes in enrollment
       patterns, and the implementation of the changes initiated by the
       in-depth evaluations.

(13)   Outside (off-campus) consultants should not be employed as the
       usual means of evaluating academic programs, especially for the
       initial review of a program. However, when the internal (on-campus)
       procedures raise questions which cannot be answered readily by such
       procedures, advice should be sought from carefully chosen outside
       consultants.

(14)   With the concurrence of the Senate, the Vice President for Academic
       Affairs shall appoint a Council on Program Evaluation (COPE), to
       consist of eleven members, one of whom shall be an undergraduate
       student, another a graduate or professional student, and five of
       whom shall be faculty members without administrative appointments.
       COPE shall advise the Vice President on the development and
       operation of the campus-wide system of program evaluation and be
       responsible for the in-depth evaluations suggested in (11), which
       usually should be made on a broad-area basis. Also, COPE shall
       undertake similar review functions for other types of programs as
       specified later in this report, or which the Vice President may
       assign to it or which it may initiate. COPE may operate through
       subcommittees.

(15)   Before a decision is made to initiate a new program, the proposal
       for it shall be evaluated by COPE in terms of the criteria and
       standards employed for existing programs.

(16)   Each college or equivalent academic unit shall submit to the Vice
       President for Academic Affairs a plan for evaluating its units
       and the programs therein. The plan should be consistent with the
       general principles of this report. It should include procedures
       for carrying out annual reviews and propose a grouping of its units
       and a timetable for the broad-area, in-depth evaluations. The
       broad-area and other evaluations may involve the entire college or

parts thereof as well as units or programs of other colleges. The plans submitted shall be reviewed, modified as necessary, and coordinated by COPE.

(17) The composition and procedures of evaluation groups should be designed to minimize conflicts of interest.

(18) An academic program (or unit) shall not be eliminated or cut by more than one-third in staff or in State funds except upon recommendation by the Council on Program Evaluation. This does not preclude smaller cuts upon recommendation of other review groups or by administrative action.

(19) A program (or unit) which is recommended for elimination or major cut, as provided in (18), may appeal the recommendation. In this case the Vice President for Academic Affairs will refer the matter to the Senate Coordinating Committee on Education for review. That committee or a specially constituted subcommittee thereof, will submit its recommendations to the Vice President and any appeal from his decision would be via the usual administrative channels.

(20) Procedures must be developed for phasing a program out or consolidating it with others so as to minimize the adverse effects upon students and staff of its elimination.

(21) Evaluations of major public service programs should be conducted by a standing subcommittee of COPE specifically constituted for that purpose.

Criteria and indicators for evaluation of public service programs should be similar to those proposed for academic programs with the following qualifications:

a. Evaluation of the social value of a public service function must include an adequate sampling of "clientele" opinion.

b. The relationship between public service and academic programs should be considered.

c. The use of competent and disinterested outside consultants is considered to be appropriate, but it is not required as a general practice.

(22) The extent to which a public service program is self-sustaining
      shall be taken into account in its evaluation. So far as
      practicable, public service activities should seek to be self-
      sustaining, at least in aggregate, with indirect as well as
      direct costs borne by the users or by the agencies supporting the
      activity.

(23) Evaluation of administrative offices and supporting services shall
      be conducted in depth every three years by COPE, following the
      recommendations listed earlier.

(24) That the faculty approved by the University Senate for membership
      on COPE be compensated either by financial remuneration or
      released time for the duration of their active service and partici-
      pation on COPE.

(25) That appropriate summer stipends be given to the graduate and
      undergraduate members of COPE for the duration of their active
      service and participation on COPE.

DEPARTMENT OF CHEMICAL ENGINEERING
PHONE: 302-738-2543

April 5, 1973

MEMORANDUM

TO   :   John Crawford, Secretary
           University Senate

FROM   :   Stanley I. Sandler, Chairman
           Coordinating Committee on Academic Services

SUBJECT: A Senate Resolution on the Bookstore

The Coordinating Committee on Academic Services has
been studying the scope and operations of the University Book-
store during the present year. It is the feeling of the Com-
mittee that the bookstore could make a larger contribution
to the cultural environment of the University of Delaware by
maintaining a larger selection of noncourse related books,
general and technical reference books, exhibiting and perhaps
selling student and faculty artwork, featuring and stocking
books written by University faculty and alumni, promoting the
works of guest speakers, etc. Unfortunately, such activities
cannot be carried out in the cramped facilities and location
of the bookstore. Therefore, the Coordinating Committee on
Academic Services submits the following resolution to the
University Senate:

>   Resolved, the University Senate realizes that the
>   Bookstore could make a larger contribution to the
>   cultural and academic environment of the Univer-
>   sity of Delaware if it were centrally located in
>   more spacious facilities. Therefore, the Senate
>   requests that the President and Provost give high
>   priority to the relocation and expansion of the
>   Bookstore in future University planning.

SIS:msm

May 7, 1973

PROPOSED AMENDMENT TO THE
REPORT ON ESTABLISHING A COUNCIL ON PROGRAM EVALUATION

In recognition of the heavy load imposed on the faculty
and student members of COPE the following recommendations are
made:

Recommendation 24: That the faculty approved by the Univer-
sity Senate for membership on COPE be placed on eleven-month
contracts (if on nine-month contracts) for the duration of
their active service and participation on COPE.

Recommendation 25: That summer stipends be given to the
graduate and undergraduate members of COPE, commensurate with
the appropriate graduate and undergraduate fellowships, for
the duration of their active service and participation on
COPE.

EES/dpe

A STUDY OF PROGRAM EVALUATION

Synopsis

This report describes a preliminary study of how the campus might go about and benefit from a more systematic evaluation of its programs. Our suggestions and proposals are given in abbreviated form on page iv. They address two main objectives: (a) to evolve an effective, viable system of evaluating all programs (or units) on an in-depth basis once every three to five years, and (b) to strengthen the present annual budgetary reviews.

Central guidance is needed, especially for the in-depth evaluations and their relation to campus planning and goals; such guidance could be generated by a campus Council on Program Evaluation (COPE). The provision for faculty and student members of COPE is to ensure that these groups will have an appropriate voice. For similar reasons, we suggest that COPE should be appointed by the Vice President for Academic Affairs with the concurrence of the University Senate, and we believe it desirable to have review and appeal procedures for any major cuts or program eliminations. Also, we see a need for greater concern and involvement at all administrative levels with program evaluation on a continuing basis, both in connection with strengthening our annual budgetary reviews and in order to accomplish the periodic in-depth evaluations. Moreover, incentives should be devised and employed to encourage critical self-evaluation.

The evaluation procedures developed will have to accommodate not only a large number but also a great diversity of programs. Therefore, grouping of similar programs (or units) and the decentralization of their evaluation seem to be desirable. We suggest that programs be classified as academic, public service, or administrative in character, the latter two classes to be evaluated by standing committees of COPE using somewhat different criteria and procedures than those employed for academic programs. For example, the views of those served by a program are important whatever its nature, but this criterion is especially significant for public service and administrative programs. Also, we feel that public service programs should seek to be self-supporting.
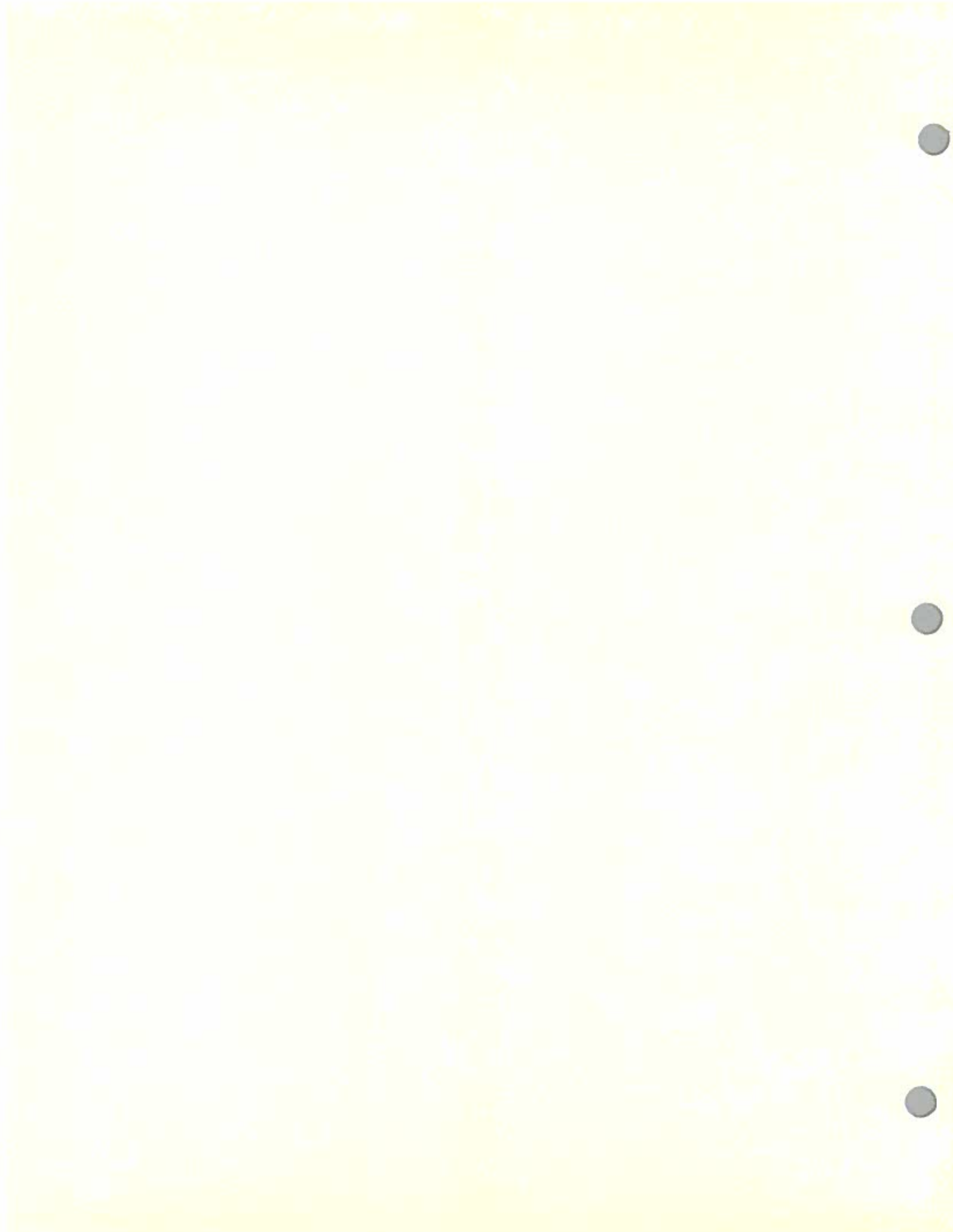
Most of our report deals in one way or another with the academic programs. We believe that their wide diversity probably can be fitted by a small number of evaluative criteria such as quality of instruction, quality or distinctiveness of creative or professional activity, centrality, societal value, and potential and future expectations. In addition, costs and cost-effectiveness must be examined. As is, many of the relevant data can be obtained; however, there is an urgent need for a management information system to develop and provide on a more systematic and useful basis the data necessary for evaluation studies. Moreover, we need to seek effective ways to estimate instructional quality.

The criteria applicable to a particular academic program and the manner of application will both depend upon the nature of the program. It seems impossible to anticipate such differences explicitly. Instead the overall procedures should be designed to accommodate and be responsive to the distinctive features. Several of our suggestions are made with this approach

in mind. Hence, each program (or unit) is to state its mission and make a self-evaluation, identifying the criteria believed to be most suitable for the purpose. Also, we suggest that each college propose to COPE a set of evaluation procedures which it considers suitable for its needs.

Finally, besides being a preliminary report, what we propose is an experimental approach to a very difficult, new set of complex problems. We're not at all sure of the best ways to approach these problems, but we are convinced that major creative effort must be applied to them by many people. For this reason we have included a good deal of background material and identified some of the alternatives. Our recommendations are not the final word. They differ widely in substance and in definiteness. If any of the proposed procedures is adopted but doesn't work in practice, it should be modified promptly or discarded. What is important is that we take on the task and get it done in the best manner feasible.

LIST OF RECOMMENDATIONS

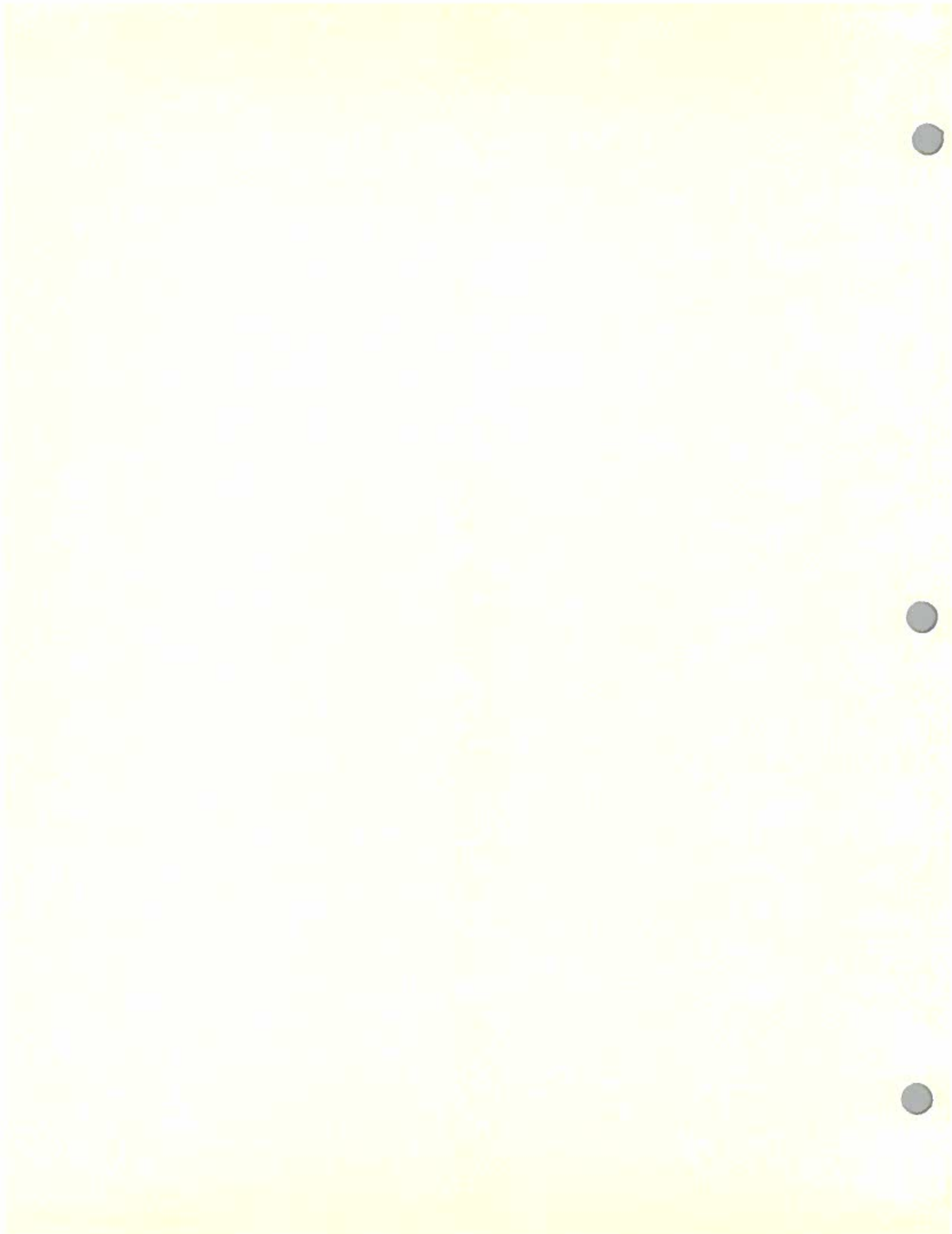*These items are more substantive in content.

*These items are more substantive in content.

I. INTRODUCTION

The rhetoric available on the plight of higher education today leaves little room for original insight and comment about the background and nature of the problems addressed in our study. In simple terms, the unprecedented influx of students and resources during the past two decades of dramatic growth has given higher education an acute case of fiscal and intellectual indigestion. Many are joined in efforts to relieve this plight--legislators and taxpayers, faculties and students, professionals and amateurs. Few if any will dispute the existence of problems in higher education. But perceptions of the problems and the solutions suggested are diverse, equaling in number and variety the individuals and sources consulted.

The truth of the matter is that there are many problems and many solutions, the nature and scale of which depend upon the mode of perception and whether it be from afar in broadest perspective or hand-to-hand in the midst of the affray. Somewhere between these extremes is the focus of this study. We have not sought and found the roots of higher education's problems on the national or even the state level. Nor have we examined in detail any one of the 112 graduate and professional programs on this campus, or any of the 210 undergraduate curricula, or any of the administrative services. We have no specific recommendations such as elimination of a Department of Extraterrestial Biology because it deals with phenomena beyond the borders of Delaware. Instead, we've looked at some of the general forces operating upon this campus, we've explored their relation to individual and institutional aspirations, and we've searched for ways to relieve the stresses and, in the process, to improve the intellectual quality and significance of our overall enterprise.

The present report is a preliminary product based upon a study by a small group of faculty, staff, and students. Basically it proposes principles and overall evaluation procedures which are intended to be adaptable enough to deal fairly and effectively with the large number and wide diversity of endeavors on our campus. But this point needs testing. Also, we believe that for any evaluation system to be truly effective in the long run it must be understood and respected by those who might be affected by it as well as by those who will have to make it work. As a means to these ends, our first recommendation is that:

> *(1) Copies of this preliminary draft shall be distributed to administrative, faculty, non-academic, and student groups with a call for critical comment and suggestions, and open hearings should be scheduled for those wishing to meet directly with the committee.*

A. On the Forces of Change

Basically, the forces which led to the development of this document are the saturation effects and negative feedback which level off the exponential part of any biological growth curve. For decades the major force in higher education has been that of growth. Planning and actions have centered on providing broader educational opportunities for an ever-increasing fraction of a larger population base. The urgent pressures for more classrooms and laboratories to accommodate more students have left too little time for the issues of quality, substance, and cost.

Of necessity, past attention in the planning and budgetary process on this campus has emphasized substantial annual increases and their distribution in response to the enrollment pressures. Moreover, when the growth began to level off in the late sixties, it was replaced at the center of the stage by the urgent crises and politics of student confrontation. Only residual effort could be given to the elimination of unsuccessful experiments, to the careful study and nurture required for improved quality, or to the budgetary analyses needed for maximizing cost effectiveness. Moreover, the mechanisms and structures suitable for these purposes on a campus of 3,000 to 9,000 students have become less effective as enrollments soared beyond 10,000.

Now, very sharply, we find ourselves out of the rapid-growth mode, in a period of consolidation and budgetary retrenchment. Depending on one's viewpoint this change may be seen either as catastrophe or as opportunity. In either case, it is clear that the human and physical resources of our society are not infinite and that higher education cannot be all things to all people.

We must respond and adapt to these realities. We need on this campus new and better mechanisms and renewed dedication to enhance quality and to use available resources more wisely. Newspaper headlines tell of budgetary cuts, while editorials decry unemployment of graduates and call for greater cost effectiveness and more relevant programs. Such external pressures may leave little room for rational discourse and considered response; yet if cuts must be made, an across-the-board, nonselective approach has little appeal. In brief, if we are to retain some measure of control over our destiny we must anticipate and lead rather than follow the demands of our patrons and constituencies. Moreover, although as individuals we may find it as distasteful as proving one's innocence, we must be able to show as an institution that we are indeed responsible and effective custodians of the public trust.

In the past, vitality of human endeavor has been synonymous with growth in scale or number. Indeed much of the experimentation and innovation in higher education, including that on this campus, has been made possible by the additional resources provided for its growth. But when additional resources are no longer readily available and growth does not occur, how can we hope to undertake truly innovative learning and scientific inquiry and also be more responsive to the rapidly changing needs of society? Creative renewal in such constricted circumstances can come about only through critical self-examination and the reallocation of resources. Similar conclusions were reached several years ago in "The Decade Ahead, Volume I" report by the Community Design Planning Commission (CDPC). Moreover the CDPC has recommended the development of "procedures for continuous review---along with periodic reevaluation and updating of objectives" of every educational program on campus.

The recommendation responds also to the other concerns which we have expressed above. In fact, its explication is the objective of the present study. We believe, however, that evaluations should not be limited to "educational programs" but should be applied to all campus programs and units, administrative and supportive as well as "educational." Furthermore, the value of a program is measured by how much it helps us attain our institutional objectives. Therefore, program evaluation should be coordinated

closely with the planning functions which set our objectives. We have combined these points in a single, very general recommendation which we believe to be the heart of the matter:

> *(2) The Vice President for Academic Affairs shall carry out an evaluation on a cyclical, continuing basis, of every program on campus. This evaluation shall be related to continued long-range planning, conducted by the office of the Vice President for Academic Affairs and designed to sharpen the perceptions of our institutional objectives and to bring them into better focus in the decision making of the campus.*

In the remainder of the Introduction we consider briefly some general aspects of program evaluation and propose some characteristics which we believe to be desirable for the overall campus system. Then we take up the main topic of academic programs, which is followed by a section on ~~international and~~ public service programs, and one on administrative offices and supportive services.

B. General Aspects of Program Evaluation

The evaluation of an <u>individual</u> program has three identifiable parts whether the program be an undergraduate curriculum in Art History, Agricultural Extension, or the Office of Student Affairs. These parts fall in the following sequence:

a. A statement of the program's mission and comparison of it with institutional objectives.

b. The definition of criteria and of more specific indicators which measure how well the program attains its mission.

c. The procedures for observing the indicators, applying the criteria to the program, and using the results for decision making.

All three are taken up in some detail in the sections on each of the major categories into which we've grouped our campus activities.

Of these, the statement and review of a program's mission is basic. We must first establish whether a program's mission is too narrowly conceived or is obsolescent; otherwise the subsequent evaluation can be meaningless. The program might be performing very well; but if it's mission is obsolete it should be terminated. Therefore, when a program is part of some larger effort, its individual mission must somehow be tested against the broader objectives of the enterprise as a whole. This exposes the central issues of institutional objectives and priorities and how they should be determined, which is referred to in Recommendation (2). It also raises nonsensical questions such as whether art or music is more important. In any case, the determination of institutional objectives is beyond the scope of our committee, being the main subject of the much larger efforts of the CDPC. Therefore, in the subsequent discussion of particular types of program we refer you to the CDPC recommendations about such objectives.

In many ways, those playing an active role in a program are the most knowledgeable about it, though probably not among the most objective. Certainly, they should have a conception of their mission and a capability for self-evaluation. Moreover, self-evaluation can explore and refine internal operations in much greater depth than will generally be feasible for any practical external evaluation. Also, the questions which are not addressed by a self-evaluation can be more revealing to an observer than those which are. For these reasons, we propose in general that:

(3) The evaluation of a program or unit shall be based in part on: (a) the submittal by the program or unit of a statement of its mission; and (b) a critical self-evaluation by the program or unit of its current status, together with specific proposals for improvement of its quality and productivity. These will be assessed in relation to the broad objectives of the campus long range plan.

A related topic which consumed too much of our time and which will no doubt arise again, is the "oranges versus apples" argument. There are few, if any, absolutes in value judgments, so it is far easier to compare two similar programs (apples) with one another than to devise an absolute scale against which to evaluate all programs (apples and oranges). This is implicit in our grouping of programs into the three major categories employed. However, the principle extends to programs within each category and should be employed when appropriate and convenient. For example, the academic programs in art and physics differ significantly in mission and character and one would expect corresponding differences in the appropriate criteria and indicators. However, comparative studies of closely related programs such as art and music or physics and chemistry could be more instructive than completely independent evaluations. Or it might be very helpful to make a comparative analysis of a factor common to many dissimilar programs, e.g. utilization of teaching assistants. For this reason, we recommend that:

(4) In the review of programs, efforts should be made to include comparative studies of several closely related programs or of a readily isolated factor common to many programs.

C. The Views of Those Reviewed

We must also consider the evaluation process from the standpoint of those faculty and staff whose program and efforts are reviewed. Institutional needs are not always in accord with individual aspirations, but this fact of life should not discourage vigorous efforts to ensure evaluations and subsequent actions which are fair, credible, and sensitive to human needs. Credibility and fairness can be promoted by giving a voice in the evaluation procedures to those associated with a program being evaluated. Recommendation (3) provides for such a voice in the statement of program mission and encourages self-evaluation. In addition we propose that:

(5) Those associated with a program should be given an opportunity to propose criteria and indicators which they believe to be appropriate for evaluating the program.

Ideally, an evaluation procedure should not only provide rewards to those who win the gold stars but also have some incentives to encourage those who fare less well. One such incentive is implicit in Recommendation (2) which envisages program evaluation as a means of liberating funds for reassignment at the campus level in some form of open competition for innovation, change, and quality improvement. However, the magnitude of the task is such that much of it by necessity must be accomplished at the college, department, office, or other major unit level. For such decentralization to be viable in the long run, there must be some sustaining incentives more immediate than the campus competition. That is, the procedures should promote good "local" management.

For example, suppose a department (college or office) undertakes <u>its own</u> <u>appraisal</u> of one of its programs (or units). It finds suitable ways in which costs can be trimmed and it also comes up with several good ideas for quality improvement. In such circumstances, some fraction of the savings in costs, perhaps as much as half, should be reallocated directly and immediately to the department (college or office) for its own improvement, as a reward for initiative and good performance. With this particular example in mind, but recognizing the impossibility of covering with a simple formula the wide variety of situations which will arise, we propose the general principle that:

(6) When a unit initiates and carries out an evaluation of one or more of its own programs at least some of any resources released in connection with the evaluation should be reassigned to promote the quality and effectiveness of programs in the unit.

II. ACADEMIC PROGRAMS

The major campus activity is instruction, which includes the research apprenticeship of graduate studies. Instruction is offered in individual courses which when taken in some specified combination called an academic program or curriculum lead to certification or a degree. The number of courses listed as of June, 1972, is 750 at the graduate and professional (800-900) levels, 805 at the graduate-undergraduate (500-600) level, and 1,110 at the undergraduate (100 to 400) level, a total of nearly 2,700. Subjects range from accountancy to zoology, level of program from a two-year Associate Degree in Agribusiness Technology to the Ph.D. degrees in History and Chemistry, and program mission from broad, cultural enhancement of the individual to highly technical graduate research training for a professional career. There are more than 250 separately identified academic programs on this campus. Instruction is also carried out in extension and continuing education programs.

The main task of our committee is to reduce this diversity and these numbers to some sort of manageable proportions. First we considered the classification of programs by subject area, by level or type of program, and by the nature of the program's mission. The objectives, criteria, indicators, and procedures which might apply to each of the following types and levels of program: undergraduate, graduate, professional, public service, and administrative programs were considered. It quickly became apparent to us that the similarities of the undergraduate, graduate and professional programs outweigh their differences.

Therefore, we've elected to group them together under an "academic programs" heading and go as far as seems valid in defining objectives, criteria, indicators and evaluation procedures common to all. However, our intent in so doing is not to force all academic programs into the same unimaginative, committee-style mold. We recognize that no approach whatever its merits of simplicity will accommodate the diversity and magnitude of the activities on this campus to everyone's satisfaction, nor would a more complex one do much better. We have tried to allow for some of the major differences but of more importance, we have sought procedures which will recognize differences as they arise in the evaluation process and be suitably responsive to them.

A. Institutional Objectives

In connection with Recommendation (2) we mentioned the need "to sharpen the perceptions of our institutional objectives" and to use those objectives in testing the missions of particular programs. The problem is that objectives are easy to state in general terms, which are not very helpful, while more detailed statements are hard to develop. For example, in simple terms the traditional goals of a land-grant university are instruction, research and public service (presumably in that order of priority).

A somewhat more specific statement of philosophy has been recommended for the campus by the Community Design Planning Commission in "Decade Ahead."

"From the outset, we have been unanimous in our agreement that the student is at the heart of the University's total program of teaching, research, and service. But, we define student in the broad sense: not merely the tuition-payer, but all who are actively engaged in our common goal of learning. Hence, the under-graduate or graduate student studying for a degree, the faculty member studying his profession and his discipline, the administrator studying the University and its operation--all are students, and all have a shared responsibility as well as a common goal...."

"Henceforward, the total intellectual, social, and emotional growth of each student is the standard against which all University activities must be measured. With this standard in mind, the University must review the whole teaching-learning process, with a thorough examination of all aspects of present programs, and with each element of the academic community reexamining itself constantly as it moves through the 1970's."

In general, the CDPC recommends most highly those departmental plans that, in addition to the traditional goals of higher education in teaching, research and service, would:

"Emphasize objectives and goals that are consistent with the overall philosophy of the University and focus on the total intellectual, social, and personal development of students as well as competence in the discipline.

"Enable the academic unit to make a substantive contribution to the improvement of the quality of life by reflecting in its detailed plans, as well as its philosophy, a strong concern for the human condition and spirit and for the social implications of the material presented.

"Recognize the vital role of good teaching in the University enter-prise, by containing incentives for faculty members to excel in the classroom as well as in research, and by insuring that the back-grounds, professional interests, and teaching approaches of the faculty provide an interesting and varied, yet balanced, educational experience for students.

"Reflect the unit's commitment to meaningful research and publication, particularly to those kinds of research that contribute to the solution of human problems, or enhance the quality of life, or can become directly involved with the improvement of teaching and learning.

"Build flexibility into the educational process by offering effective alternatives to traditional educational approaches for both students and faculty, or by calling for innovative methods such as inter-disciplinary teaching, where appropriate.

"Respond to the need for student involvement by making provision for students to participate in the development of curricula and in the consideration of the quality of the unit's instructional program, and by providing opportunities for students to design educational experiences on their own initiative and in line with their own interests.

"Reveal a central role in service to the University community by providing programs upon which other units depend for professional or other needs. Provide important service to the state or region and in a unit's proposed teaching, research, or service reflect an awareness of pressing state and regional problems and a dedication to their solution.

"Contain a strategy for the implementation of the proposed objectives, utilizing present strengths and recognizing present weaknesses in need of redress. Contain suitable means for assessing the accomplishments of a unit's programs, including quality of teaching, research, and service, and the extent to which the implementation meets the goals of students, the University, and society generally."

The "Decade Ahead" statements are too general for use in judging the missions of specific academic programs. Therefore, we turn to the detailed studies of our objectives made by the CDPC.

Undergraduate Education. Our general overall concerns are to provide high-quality undergraduate education, and to assume a leadership role in developing new and more effective modes of instruction, reorganizing curricula, and designing and experimenting with new educational patterns (note "The Decade Ahead" p. 9).

In order to make a rational assessment of the future directions, opportunities and emphasis of undergraduate instructional programs on this campus, it is necessary first to state our beliefs and aspirations regarding the goals of undergraduate education. Although one should be skeptical of positing timeless or time constant priorities and goals for undergraduate education, the following do appear important as guiding postulates at this point in time (note "The Decade Ahead" p 33 to 35, p 42 to 44, and p 51-52).

Every undergraduate should develop or have developed the basic ability to:

read and listen intelligently
write and speak coherently
observe and respond critically to a variety of forms of communication, verbal and non-verbal
think clearly, critically, and creatively
think quantitatively
and think qualitatively

and these basic attitudes:

> desire to continue to learn
> intellectual excitement and engagement
> academic honesty
> aesthetic sensitivity
> curiosity
> respect for evidence
> healthy skepticism
> tolerance of disagreement
> flexibility of thought . . .
> self-respect, self-reliance, and self-acceptance . . .
> respect for the dignity of every human being . . .

Every undergraduate student should acquire an understanding in depth of some aspect of our heterogeneous culture, acquire an acquaintance with most of our culture's basic aspects, and should examine in some depth a culture foreign to him.

Professional preparation, to the extent that it goes beyond the above-mentioned basic abilities and attitudes, should be provided for those professions that require the theoretical underpinning that an advanced institution of learning can provide, that are desirable, and that are likely to be pursued by a sizeable body of students. The prime function of a professional education is to train a student to advance with, and at best, lead the development of his chosen area. Undergraduate professional training should not be directed simply toward a contemporary job category, but should be sufficiently generalized for the future development of the student and his area of interest.

Graduate Education (Note "The Decade Ahead" p 55-57) - This University should develop a leadership role in graduate education in the fundamental fields of learning and the closely related professional and occupational areas. Within this context, this University should assume responsibility for the most advanced levels of graduate teaching and research and should exercise leadership in identifying, formulating and developing new fields of intellectual concern in the graduate areas.

As a first order of priority, this campus should be built into the center for graduate education and research in the State that is unsurpassed in quality in the nation. Thus, in the area of education, the pursuit of excellence should be the prime objective, and the quality in terms of our faculty and students an uncompromising goal.

This campus should place an increasing emphasis on graduate professional programs which (a) have either a broad applied or interdisciplinary focus and (b) train persons who are able to work effectively in an environment of rapid social change.

Graduate Professional Education - This campus serves four vital roles in graduate professional education. One, that is widely understood and appreciated, is the supply of highly skilled professionals to meet the

demands of business, government, and the general public. The supply of accountants and engineers is illustrative. A second role, less well understood, is to develop model programs to advance levels and directions of training throughout the state and nation. Teacher training programs such as Del Mod is an important example. A third role is to open new career opportunities for students by anticipating the future needs of the state and the nation. The program in Physical Therapy is illustrative. Old professions are constantly in need of upgrading. Some may have to be eliminated. New professions are continually emerging. A fourth role is a corollary of the first three--to improve the quality of professional education through research and technological development. Research products for other purposes often also materialize. Finally, the retraining of professionals later in their careers may become a major function of the University in this area.

The statements and the CDPC recommendations were developed in a broader context than program evaluation. So they vary widely in their suitability for our purposes. An important task in the first cycle of evaluations will be to refine and extend such statements for use in the assessments.

III. General Aspect of Program Evaluation

The evaluation of an _individual_ program has three identifiable parts whether the program be an undergraduate curriculum in Art History, Agricultural Extension, or the Office of Student Affairs. These parts fall in the following sequence:

a. A statement of the program's mission and comparison of it with institutional objectives.

b. The definition of criteria and of more specific indicators which measure how well the program attains its mission.

c. The procedures for observing the indicators, applying the criteria to the program, and using the results for decision making.

Of these, the statement and review of a program's mission is basic. We must first establish whether a program's mission is too narrowly conceived or is obsolescent; otherwise the subsequent evaluation can be meaningless. The program might be performing very well; but if it's mission is obsolete it should be terminated. Therefore, when a program is part of some larger effort, its individual mission must somehow be tested against the broader objectives of the enterprise as a whole. This exposes the central issues of institutional objectives and priorities and how they should be determined, which is referred to in Recommendation (1). It also raises nonsensical questions such as whether art or music is more important. In any case, the determination of institutional objectives is beyond the scope of our committee, being the main subject of the much larger efforts of the Community Design Planning Commission. Therefore, in the subsequent discussion of particular types of program we refer you to the CDPC recommendations about such objectives.

In many ways, those playing an active role in a program are the most knowledgeable about it, though probably not among the most objective. Certainly, they should have a conception of their mission and a capability for self-evaluation. Moreover, self-evaluation can explore and refine internal operations in much greater depth than will generally be feasible for any practical external evaluation. Also, the questions which are not addressed by a self-evaluation can be more revealing to an observer than those which are. For these reasons, we propose in general that:

Recommendation:

(3) The evaluation of a program or unit shall be based in part on: (a) the submittal by the program or unit of a statement of its mission; and (b) a critical self-evaluation by the program or unit of its current status, together with specific proposals for improvement of its quality and productivity. These will be assessed in relation to the broad objectives of the campus long range plan.

Recommendation:

(4) In the review of programs, efforts should be made to include comparative studies of several closely related programs or of a readily isolated factor common to many programs.

Recommendation:

(5) Those associated with a program should be given an opportunity to propose criteria and indicators which they believe to be appropriate for evaluating the program.

Recommendation:

(6) When a unit initiates and carries out an evaluation of one or more of its own programs at least some of any resources released in connection with the evaluation should be reassigned to promote the quality and effectiveness of programs in the unit.

A. Criteria for Evaluation

Recommendation:

(7) A small number of major criteria, three to five, shall be employed for the evaluation of the academic aspects of a program. Insofar as feasible, these criteria should be independent of one another. It is proposed that the following criteria be employed initially:

a. *Quality of instruction in individual courses and of the instructional program as a whole.*

b. *Quality of research, creative activity, scholarly work, service, or of professional performance.*

c. *Centrality, i.e. the contribution or importance of the program in question to other campus programs.*

d. *Value of the program to society or its uniqueness in the state's program of higher education.*

e. *Potential and future expectations.*

The ratings of programs according to each criterion should be summarized on a four-point scale such as Outstanding, Strong, Adequate, and Marginal. The weights to be attached to these criteria, the format in which to present the results of an evaluation and to whom, the extent of supporting analysis and commentary, and the actions appropriate for particular circumstances are important aspect of the evaluations. However, they

*are best evolved in connection with actual evaluations and should
be given high priority at that time.*

For each criterion there are usually at least several facets of a program which can be identified and which measure to some degree the extent to which the program meets that criterion. The particular indicators for a given criterion may differ appreciably for different programs. In order to accommodate such differences, as well as to come to closer grips with ranking a program with respect to the criterion, we recommend that:

Recommendation:

*(8) A set of indicators, numerical insofar as feasible, shall
be developed for evaluating a program with respect to each
criterion. Preliminary checklists of such indicators are given
in the text; they are not listed in order of priority nor are they
intended to be complete. The particular indicators employed for a
program will be adjusted to match the wide diversity of programs
on the campus, with the advice of those responsible for the program
as stated in Recommendation (5).*

The criteria and indicators proposed are directed at the "academic features" of a program. They do not deal with questions of cost and productivity. Instead, the latter are considered separately in Part B of this section.

<u>Quality of Program</u>

Checklist of Indicators

a. Assessment by students of courses, teachers, and overall program.

b. Quality of program as viewed by recent graduates.

c. Standards for admission to and retention in program.

d. Availability of adequate space and facilities.

e. Commitment to and concern for instructional programs.

    i. Effectiveness of student advising

    ii. Distribution of instructional load by faculty rank

    iii. Responsiveness to changing needs of program

    iv. A faculty reward system to promote quality instruction

    v. Assessment of and responsiveness to student attitudes

Quality of Creative Activity or Professional Performance

Checklist of Indicators

a. ACE ratings.

b. Accreditation or other ratings by professional societies.

c. Outside support compared to that for other programs in the field.

d. External recognition of staff members.

    i. Who's Who and similar honors

    ii. Exhibits, commissions, prizes and awards

    iii. Lectureships, visiting appointments, job offers

    iv. Advisory appointments and consulting

    v. Offices held and professional activities

e. Publications and other evidence of creative productivity.

f. Productivity and recognition of graduates from program.

g. Creative and efficient use of space and facilities.

Centrality

Checklist of Indicators

a. Relation of program to institutional mission.

b. Instruction of students from other programs.

c. Contribution of program to those in other programs.

d. Redundancy, i.e. unnecessary and nonproductive overlap with other programs on campus.

Value to Society or Uniqueness

Checklist of Indicators

a. Contributions to solution of societal problems.

b. Value to society of graduates.

    i. Placement of current graduates

   ii.   Projected needs of society for graduates.

   iii.   Suitability of program content

   iv.   Availability of similar programs of comparable quality

   v.   Role and fraction of foreign students in program

c.   Value of program as viewed by recent graduates.

Potential and Future Expectations

Checklist of Indicators

a.   Prospects and potential of program.

   i.   As stated by those in program

   ii.   Analysis of statements by those in related areas

   iii.   Analysis of statements by outside experts

b.   Quality of leadership and intellectual life of program

   i.   As viewed by those in program

   ii.   As viewed by others on campus

c.   External trends in financial support and societal needs.

B.   Costs and Cost-Effectiveness

It seems best to consider cost and cost-effectiveness separately, the cost being the actual expenditures and the cost-effectiveness being the ratio to the actual expenditures of an estimated minimum cost for "doing the same or a better job." Both are important, and so is the distinction between them. As an example, consider two programs with the same small numbers of students, both with marginal ratings on the academic criteria above, including low centrality. Suppose also that the costs are the same, both high, but that for one it's due to the nature of the program while for the other it reflects correctable cost inefficiencies in the program. In such circumstances it might well be best to discontinue the efficient but inherently more costly program while retaining and seeking to reduce the costs of the inefficient but intrinsically less expensive program. In summary, we have come to the following conclusion:

Recommendation:

(9)   In addition to evaluation with respect to the academic criteria of Recommendation (8), it is essential that programs

be examined in terms of their costs and cost-effectiveness.
Valid indicators need to be developed for this purpose; several
possibilities are suggested.

The indicators which measure the cost of a program (or unit) are rela-
tively simple. The two most visible are the total funds expended directly
by the program (or unit) on an annual basis, from state and non-state
sources listed separately. Another highly visible set of indicators which
is often overlooked consists of the amount and cost of the space utilized by
the program. Then there are several types of financial support which might
be called semi-direct. These include items such as Unidel grants, program
grants, computer time, library acquisitions and branch library operating
costs, University Fellowships and similar awards from non-institutional
sources such as NSF predoctoral fellowships.

The indirect costs, which differ here from the definition employed by
federal auditors in connection with research grants, are the prorated costs
of the various services which the rest of the campus provides to the program.
These would range from janitorial and police services to the costs of
instructing the program's students in courses offered by other units.
Except for the latter, it seems preferable not to include indirect costs in
the evaluation process, at least initially. Instead, the evaluation of the
services themselves should include assessment by and of their clientele.

The analysis of cost-effectiveness requires some measures of the scale
of a program as well as indicators which most of us will accept as being
proportional in some way to the outputs of comparable programs, even though
we have dodged the issue of defining those outputs explicitly. Numerical
indicators which may be suitable for this purpose are proposed below. Such
data should be made available for several years, because trends can be more
significant than the values for any one year.

However, these indicators can not and must not be applied as uniform
yardsticks which measure all programs in the same way. The great diversity
of our programs requires a correspondingly wide range of instructional and
operational modes in order to carry out their tasks. All programs cannot be
forced into the same mold and survive. Also, the list does not include any
indicator of research or scholarly output. In our opinion the quality and
significance of such work are much more important and variable than its
quantity, and therefore they are best considered as vital parts of the
academic criteria of Recommendation (7).

Checklist of Indicators

a.   Number of students majoring in the program.

b.   Number of instructional units taught by program's staff.

c.   Number of FTE staff, by level and type of assignment.

d.   Number of degrees granted by the program.

e. Failure rate of students.

f. Average length of time required to complete the program.

g. State and non-state funds employed by program.

C. Evaluation Aids and Staff Assistance

Recommendation:

(10) The Office of the Vice President for Academic Affairs shall be responsible for providing the various administrative units and program evaluation groups with the statistical information needed on a systematic, historical basis for effective program evaluation.

D. Procedures

Before proposing a means of evaluating academic programs on this campus, we need to consider some general aspects of the review process itself and explore the possibilities open to us. After all, the kinds of problems we now face are not unique or new in general, even though the specific concerns and their intensity are new to the campus. So we do not wish to rediscover the wheel. Instead we need to adapt generally useful principles of management to the newly arisen local needs.

<u>Incremental versus in-depth review</u>. Traditionally, the planning and operating budget cycle for our campus, has been an annual fiscal-year process with a lead time of about a year, and much of the planning and evaluation in the past has been connected with the annual increments resulting from growth. Such procedures focus on projected new needs and proposals for program improvement or for new programs rather than on the base budget, i.e. the total current budget (or expenditures). Such an approach is not well suited to the critical task of improving program quality and relevance with a limited University budget.

Clearly, we need in-depth procedures whereby <u>all aspects</u> of a program are evaluated. When done in a budgetary context, an in-depth study is usually called a zero-base budget review. That is the analysis starts by setting next year's budget equal to zero for the program. Those responsible for the program are then required to request and justify to the review group any and all funds (activities) which they propose to use (carry out) during the coming year.

The chief impediment to zero-base review is its time consuming and expensive nature. Also, its application to academic programs must be geared to the time scales on which the need for and the implementation of change occur. Similar considerations apply to starting up a completely new program or completely eliminating an old one. Less major changes can be accomplished in shorter periods. By the same token, if an in-depth review one year

discloses no need for major changes in a program, it is unlikely that such needs will evolve and become apparent in less than several years. For these reasons, we recommend that:

Recommendation:

(11) Each individual academic program shall be evaluated in depth at least once every five years.

The operation of an in-depth evaluation system on a long-term cycle does not eliminate the need for annual reviews. In fact, the long-term character of major changes, as just outlined, requires that there be shorter-period, follow-up procedures designed to ensure and expedite the changes which have been decided upon. Also, even though total enrollments may be stabilized at each of the several levels on the campus, it seems neither desirable nor feasible to maintain a static distribution of enrollments among all programs. So there will continue to be a need for at least some annual reassignment of resources in response to enrollment trends in programs besides those being reviewed in depth that year. Moreover, a great deal of desirable change is accomplished in the present annual budgetary process, by a large number of usually small-scale decisions based on studies at various levels and depth. Therefore we propose that:

Recommendation:

(12) There should continue to be an annual, limited-depth budgetary review of academic programs. However, it should be tied more closely and in more detail than at present to the cost-effectiveness of the programs. Its objectives should be the improvement of programs, the reallocation of resources to meet changes in enrollment patterns, and the implementation of the changes initiated by the in-depth evaluations.

Internal review versus outside consultants.

Recommendation:

(13) Outside (off-campus) consultants should not be employed as the usual means of evaluating academic programs, especially for the initial review of a program. However, when the internal (on-campus) procedures raise questions which cannot be answered readily by such procedures, advice should be sought from carefully chosen outside consultants.

An operational system. There are several general principles which we believe should be embodied in any long-term system of program evaluation for the campus. To begin with, for program evaluation to be effective it must be an integral part of the decision-making structure of the campus. Otherwise, it could absorb an inordinate amount of effort and produce no visible results.

Our evaluation procedures should generate recommendations for program improvement, in the broadest sense of the phrase. The translation of the recommendations into reality will involve the allocation or development of resources, including not only dollars but also student admissions, staff, space and facilities. Some of this can be brought about by a few, once-a-year type decisions at the campus level. Much will involve day-to-day operations at the college and department levels. Little of it can be done without active support at all levels. Therefore, all of them should take part in the evaluation procedures and all should explicitly share the responsibility for making the system work.

Secondly, it does not seem feasible for a highly centralized system to deal directly and effectively with each of the many very diverse academic programs at the requisite depth and detail. Central direction is essential if we are to evolve and maintain a continuing system of program evaluation better suited to our new breed of problems. Moreover, a central office is critical in providing suitably selected and carefully organized data for use in the assessment process. But the evaluation itself must occur at several levels simultaneously and from several viewpoints. The cornerstone is self-evaluation of a program by its own staff, because of the knowledgeable detail into which it can go. Administrative units at the campus and college levels should provide the guidelines and direction to see that the job gets done as well as started and that objective reviews and comparative analyses are made of the results of self-study by each program.

Thirdly, the grouping of closely related programs of similar types can provide a useful basis for such comparative analyses, especially of cost-effectiveness. This point is touched on in connection with Recommendation (4). For example, the costs should be more similar for programs in French and Spanish (at the same level) or in Biochemistry and Microbiology, than for the programs in French and Biochemistry. Also, such comparative studies can illuminate the unnecessary duplication or overspecialization which all large enterprises must continually guard against.

Finally, and by no means the least, there is the need for faculty and student participation in the evaluation process which inevitably will involve substantial elements of educational policy as well as executive implementation of existing policy. This concern is addressed more fully in the subsequent section on "Elimination versus renewal of programs," but the principle is relevant in this more general context.

In reducing these principles and our earlier observations to working terms we have to face the fact that we're not sure they'll work out as envisaged. Moreover, many of the important details probably can be determined better at a later stage, in a trial run. Therefore, it seems best to under-specify the operational system at this time and make it flexible enough to evolve with experience. In keeping with this view, we propose that there be two formal levels in the evaluation structure, one at the campus level under the direction of the Vice President for Academic Affairs, the second at the college or similar level. Because of the more general and central role of the campus level evaluation group we specify its appointment, composition, and functions as follows:

Recommendation:

*(14) With the concurrence of the Senate, the Vice President for
Academic Affairs shall appoint a Council on Program Evaluation
(COPE), to consist of eleven members, one of whom shall be an
undergraduate student, another a graduate or professional student,
and five of whom shall be faculty members without administrative
appointments. COPE shall advise the Vice President on the develop-
ment and operation of the campus-wide system of program evaluation
and be responsible for the in-depth evaluations suggested in (11),
which usually should be made on a broad-area basis. Also, COPE
shall undertake similar review functions for other types of pro-
grams as specified later in this report, or which the Vice President
may assign to it or which it may initiate. COPE may operate through
subcommittees.*

This seems an appropriate point at which to emphasize that program
evaluation is only one of several critical functions needed to preserve and
improve the quality and vitality of our educational enterprise. Another is
long-range planning, a third is some means of promoting innovation, change
and self-renewal, while a fourth is the budget-related process which converts
recommendations into decisions and actions. Clearly, these functions are
closely related and need coordination if there is to be effective leadership
for the campus. It is of great concern to us that there be such coordination.
Funds must not be cut from one program in order to start another of lower
quality or lower priority. At the same time we must recognize that there are
risks in any new program and that the more innovative a venture the greater
will be its risks. An organization and procedures designed to eliminate
risks will also eliminate creativity and any major new directions.

How we should meet these sometimes conflicting goals is a matter yet to
be resolved. But insofar as the evaluation of existing programs is con-
cerned, we favor Recommendation (16) as an initial approach with the under-
standing that the Vice President may later reorganize or consolidate the
operations. But whatever the structure, we believe the following safeguard
is essential:

Recommendation:

*(15) Before a decision is made to initiate a new program, the
proposal for it shall be evaluated by COPE in terms of the
criteria and standards employed for existing programs.*

Specification of the college-level part of the evaluation structure is
more difficult than that of COPE because two different functions are involved
which might be combined in some cases, but handled separately in others. One
function is the continuing, yearly evaluation of all programs or units in the
college. The other is the cyclical, in-depth evaluation of programs, usually
on a broad area basis, which could be assigned by COPE to a college group and
which may involve more than one college. Furthermore, while the responsi-
bility for in-depth evaluation is vested in COPE, we feel that any college
(or department for that matter) should be free to initiate whatever in-depth

reviews it wishes, even though they may involve other colleges. But we don't know the extent to which this will happen.

Also, there is great diversity in the nature and complexity of the colleges. So, as a starting point we propose that:

Recommendation:

(16) Each college or equivalent academic unit shall submit to the Vice President for Academic Affairs a plan for evaluating its units and the programs therein. The plan should be consistent with the general principles of this report. It should include procedures for carrying out annual reviews and propose a grouping of its units and a timetable for the broad-area, in-depth evaluations. The broad-area and other evaluations may involve the entire college or parts thereof as well as units or programs of other colleges. The plans submitted shall be reviewed, modified as necessary, and coordinated by COPE.

Many departments administer both undergraduate and graduate programs. In such cases it is very difficult to separate the two programs, so the plans submitted in response to Recommendation (16) should provide for their joint evaluation.

Students can contribute a great deal to program evaluation and they as well as faculty should be encouraged to do so. An area in which the help of students is indispensable is in estimating the quality of instructional programs, and our intent is that the proposed study of the question develop suitable means for student input. Also, it seems to us that students can be especially effective and helpful in the evaluations of programs at the department level and such participation should be encouraged.

Another feature of the review procedures is that those engaged in the evaluation of a program not only should be knowledgeable, but also it is very important that they be disinterested or at least objective. Because of this we specify that:

Recommendation:

(17) The composition and procedures of evaluation groups should be designed to minimize conflicts of interest.

<u>Elimination versus renewal of programs</u>. In view of the large number of programs on campus it is inevitable that, however painful and difficult it may be, decisions will be made to eliminate some programs. The number, however, will be small in comparison to the total. Even smaller will be the number of administrative units eliminated, because each such unit is ordinarily responsible for several programs. It seems very likely that virtually all of the recommendations forthcoming from program evaluation will be directed towards improving the quality, cost-effectiveness, and relevance of existing programs rather than their elimination. Nonetheless, the elimination of a program presents unique problems of an intensity which requires special and careful consideration.

First of all, no group of individuals whose dedication, aspirations, and livelihood are tied to an enterprise is going to vote itself out of existence. Secondly, the multi-layered structure of faculty review and public debate, at the department and college levels, which is used for initiating or changing the content or structure of programs, is ill-suited for the elimination of programs. This is one reason why so few have ever been eliminated even though we all know of at least one program that has long since outlived its reasons for being. (But it's always at the other end of the campus!) On the other hand, administrative fiat without faculty participation in some way will have little credibility and will run major risks of being poorly conceived. We need to develop principles and establish guidelines for dealing with a very basic set of new and difficult problems.

Even in the abstract, the problems are thorny. In practice, their solutions are certain to depend much more on the character and insights of those responsible than on the format employed. With this admonition, we recommend that:

Recommendation:

(18) An academic program (or unit) shall not be eliminated or cut by more than one-third in staff or in state funds except upon recommendation by the Council on Program Evaluation. This does not preclude smaller cuts upon recommendation of other review groups or by administrative action.

Recommendation:

(19) A program (or unit) which is recommended for elimination or major cut, as provided in (18), may appeal the recommendation. In this case the Vice President for Academic Affairs will refer the matter to the Senate Coordinating Committee on Education for review. That committee or a specially constituted subcommittee thereof, will submit its recommendations to the Vice President and any appeal from his decision would be via the usual administrative channels.

The decision to eliminate a program is only the first step in a long and difficult process. Consideration must be given not only to the academic and non-academic staff but also to those students who are enrolled in the program. Commitments made in good faith cannot be abrogated. Strong and imaginative efforts must be made to minimize the inevitable adverse effects upon those involved. Maximum advantage must be made of the usual attrition in staff, including transfers to fill vacancies in other programs. This is more feasible for those with less-specialized background and talents. For others, means should be provided for retraining to fill such vacancies, if suitable opportunities can be found. If all else fails, reduced-time appointments or early retirement might be arranged for tenured faculty whose appointments would otherwise have to be terminated. Other more imaginative and helpful approaches can no doubt be found in particular cases. The essential point is that:

Recommendation:

(20) Procedures must be developed for phasing a program out or consolidating it with others so as to minimize the adverse effects upon students and staff of its elimination.

IV. Public Service Programs

Procedures and Criteria for Evaluation

The procedures and criteria appropriate for evaluating public service programs should not differ greatly from those for academic programs. However, it should be pointed out that many public service activities do not involve formal instruction, so that element will be absent in such cases.

As a group, public service programs have much in common, so there would be advantages in having one group responsible for in-depth evaluation and annual review of the major public service programs. It is therefore recommended that:

Recommendation:

(21) Evaluations of major public service programs should be conducted by a standing subcommittee of COPE specifically constituted for that purpose.

Criteria and indicators for evaluation of public service programs should be similar to those proposed for academic programs with the following qualifications:

a. Evaluation of the social value of a public service function must include an adequate sampling of "clientele" opinion.

b. The relationship between public service and academic programs should be considered.

c. The use of competent and disinterested outside consultants is considered to be appropriate, but it is not required as a general practice.

In addition to the more important differences between academic and public service programs given in the recommendation, the relative importance of some of the criteria differ and there are other more suitable indicators. Details of several of these differences are presented below.

Value of Contribution to Society. Clearly, a public service program has no merit if it does not provide a service which meets needs of society. So this criterion is of central importance. Two questions arise: "How are the needs of society to be determined?" "What constitutes society, or the clientele of the public service, and how appropriate is it for the University to provide them with the service?"

Additional Indicators.

A. Need expressed for service and benefits expected by clientele.

B. Appropriateness of the University as the source of service.

i.   Contractual or legal commitment to provide the service.

ii. Alternate sources of the service.

iii. Funds available only if service provided.

Quality of Program and of Personnel. Quality is as important in public service activities as in other programs. It may be desirable to evaluate the quality of personnel separately from the quality of programs. Criteria for measuring professional quality should be similar to those used for academic activities, but with less emphasis on publications and more on performance and improvement of the service function. High quality is a necessity for the continued existence of a public service function.

Additional Indicators.

A. Expressed reactions of "clientele."

B. Official or professional recognition.

C. Number and nature of requests related to the service.

D. Competitive position for outside support.

Centrality and Relation to Academic Programs. Centrality is as valid a criterion for public service as it is for academic programs, but it is probably more difficult to assess objectively. There is a need also to consider the relationship among public service functions and between them and academic programs.

Additional Indicators.

A. Participation of students and staff in both academic and public service programs.

B. Interactions between service functions and academic programs.

C. Extent of participation of staff in public service programs.

Cost Effectiveness. Certain types of cost-benefit data can be obtained for public service activities. Such data are similar to those for academic programs and include: number of FTE staff; number of Continuing Education classes or extension meetings held, and average attendance; number, cost and distribution of Extension publications; income derived from the activity, including overhead charges. However, interpretation of the cost-benefit data for public service activities has another dimension. Not only must the benefits be considered in relation to their total costs, but also the extent to which the recipients themselves should pay for the benefits received.

In general, the extent to which a public service program can be self-sustaining is a direct indicator of its overall value to its clientele. However, self-support by itself is not sufficient justification for retaining

a public service program. With tuition being increased sharply so that
students pay an increasingly larger fraction of their educational costs, it
is clear that public service programs should be as nearly self-sustaining as
possible and we recommend that:

Recommendation:

*(22) The extent to which a public service program is self-
sustaining shall be taken into account in its evaluation. So
far as practicable, public service activities should seek to be
self-sustaining, at least in aggregate, with indirect as well as
direct costs borne by the users or by the agencies supporting the
activity.*

V. Administrative Offices and Supporting Services

The central function of a university is ~~instruction~~ *education*—the communication and expansion of knowledge through teaching and research. ~~Instructional~~ *Educational* activity requires administrative and support services operated for the sole purpose of assisting the ~~instructional~~ *educational* activities of the campus.

Students and faculty usually share differences of opinion as to what is required in administrative and supporting service for the instructional program. For this reason, it is essential that practical effective ways be found to evaluate administrative and support services.

It is apparent that academic criteria will not provide for effective evaluation of administrative and service units; a separate approach is needed to evaluate and improve efficiency and effectiveness.

Recommendation:

(23) Evaluation of administrative offices and supporting services shall be conducted in depth every three years by COPE, following the recommendations listed earlier.

3/20/73