PROVOST: ELIOT STELLAR

The election of Dr. Eliot Stellar as Provost of the University was announced Friday by Trustees Chairman William L. Day. Dr. Stellar, who takes office this week, was nominated by the President on the recommendation of a consultative committee headed by Dr. Richard Solomon.

The new Provost succeeds Curtis Reitz, who continues as Professor of Law and will devote part of his time to administrative work as University Counsellor. He will be concerned with legal advice and with issues such as educational contract arrangements with the Commonwealth.

"Eliot Stellar's selection as Provost is a signally happy event for the University," Mr. Reitz said. "He comes to the task with a broad background in the life of this institution. His personal warmth and enthusiasm for Pennsylvania will be appreciated by all who come to know him."

President Myerson called Dr. Stellar "one of our most distinguished faculty, respected not only for his achievements as a scholar and as a teacher, but for his deep devotion to the University. For the past year, Dr. Stellar has been serving as co-chairman of the Development Commission which I established and which has been engaged in a University-wide analysis of our future needs. There could be no better apprenticeship for the provostship. I look forward tremendously to working with Eliot Stellar."

Dr. Stellar has been Professor of Physiological Psychology in the Anatomy Department (Medicine) since 1960, and Director since 1965 of the Institute of Neurological Sciences, a center for basic research and training in the study of the organization and function of the brain.

A 1941 graduate of Harvard with M.Sc. and Ph.D. degrees from Brown, he was an Assistant Professor of Psychology at Johns Hopkins when Dr. Louis B. Flexner persuaded him to come to Penn in 1954. He was elected to the National Academy of Sciences in 1968 and to the American Academy of Arts and Sciences in 1972, and won the Warren Medal of the Society of Experimental Psychologists in 1967. He serves on a number of national science advisory boards including the Brain Sciences Committee of the National Academy, which evaluates NIH-supported research in several fields.

Dr. Stellar co-authored with C. T. Morgan of Texas a classic textbook on physiological psychology, and with Dr. Vincent G. Dethier of Penn edited a small volume on animal behavior which has been translated into eight languages. He is editor of the Journal of Comparative Physiological Psychology, and co-editor with Penn's Dr. James Sprague of a scholarly series, Progress in Physiological Psychiatry.

CITY AND REGIONAL PLANNING: LOWDON WINGO

Lowdon Wingo has become Chairman of the Department of City and Regional Planning and Britton Harris chairman of the graduate group in that area, Dean Peter Shepheard announced this week. Professor Harris also remains 1907 Foundation Professor of Transportation.

Professor Wingo comes to the University from Washington, D. C., where he has been director of urban and regional studies for Resources for the Future, Inc., a private, nonprofit organization conducting research on environment, natural resources and economic development. He took his B.A. and M.A. in 1950 at Chicago and his M.P.A. in 1957 at Harvard, where he held a Littauer Fellowship. He was later a McTaggart Fellow at Glasgow. He has been consultant to the Ford Foundation in Chile, to OAS in Peru and to the American-Yugoslav Program in Regional Planning; member of the World Bank Economic Mission to Venezuela; and advisor to several U.S. government agencies. He is the author of Transportation and Urban Land, co-editor of Issues in Urban Economics (with Harvey Perloff) and editor of Cities and Space and of a three-volume series on The Governance of Metropolitan Regions.
University Life:

On October 10, a Joint Committee of the Council's Faculty Affairs Committee and its Committee on Student Affairs published their Preliminary Report on University Life with a request for comment. The following response is based not on a new document but on a report done in 1969.

Education in University City

In the spring of 1969, following the College Hall Sit-In, Council appointed an ad hoc Committee on Education in University City. Part I of its April 2, 1969, Interim Report looked at the problem from the point of view of a university's role in social problems. Part II went on to say:

There are more immediate and perhaps selfish justifications of this concern. This University rightfully places a great deal of emphasis on publication. To a large extent the printed page is the marketplace in which the ideas of scholars are tested. A major justification of the requirement to publish is that it is a necessary condition for a vibrant and alive intellectual community. For ages the cry of the faculty has been: "The faculty is the University." This is unfortunately only a partial truth; it is not the whole of the University. The faculty's raison d'être is two-fold: the ideas it generates and the students it teaches. The intellectual vibrancy of the University is substantially wasted if it is not shared with the students. The sharing of ideas in the classroom is not enough. If the faculty member does not participate in the life of the campus, where both his clay feet and his sparkle are more obvious than in the classroom, the student is shortchanged. The faculty cannot be expected to participate in the life of a campus to make an impact upon the personal lives of the students unless a good (but undefined) portion of them live conveniently near the campus. The University is not likely to be wholly successful in generating the sought-after intellectual atmosphere unless the area surrounding the campus is congenial to the life-style of a substantial portion of the faculty. Unless the community itself is vibrant and has adequate facilities, the faculty will find it unattractive. The University has an obligation to help make the surrounding community an attractive one, but it must be recognized that this obligation is to the ideal of a University to which we aspire, to the students to whom it has ostensibly been offered education beyond classroom instruction. The obligation is not primarily to the faculty members who choose to live near the University's environs.

A second reason that partakes of the character of self-interest for University's concern with the community is the nature of certain activities undertaken at the University. A number of these require the presence of University people on campus at all hours. If, in some of the sciences, where around-the-clock laboratory work is sometimes required, the faculty member interested in carrying on such activity finds that he cannot live conveniently near the University, he may simply not affiliate himself with the University.

Stability is difficult to achieve or maintain. When the environs of a university do not improve they are likely to degenerate. When further the environment becomes unsafe for University personnel and equally unsafe for the student population, the freedom of movement of the student will be significantly impaired. The student's ability to pursue his studies will be impaired by the student's inability to utilize the library facilities because campus passage to and from the library will soon reflect the vicissitudes of the surrounding community. The night life, student drama, student debate, student government and courtship will be significantly curtailed.

This has most serious implications for the candidates for graduate and professional degrees and for married students in general. The faculty family has a choice about where it lives. By and large the choice of the student is far more limited. Student families are very likely to be forced to live in the environs of the University.

And last but not least the property itself of the University will become subject to potential vandalism. Given the choice between withdrawing from and identifying with the community, in the long run it will probably be cheaper to opt for the latter. The University does not solve this complex set of problems by narrowly focusing on the well being of the University-related families who choose to live nearby. The University must focus on the community and at the hard core of a healthy community environment are adequate educational facilities. We have concluded this with what we hope is full awareness of the excruciating difficulties faced by individual University-affiliated families in providing adequate education for their own children. It must be borne in mind, however, that the community will not be a healthy one unless there are adequate facilities for all and if the community is not healthy not many University-related families will remain long in the area. A narrow focus is a shortsighted one.

The Report then went on to suggest specific corrective measures that might be considered; discussed specific problems in public education and various cooperative enterprises in which the University was already involved; and recommended that "the Committee explore the need for the establishment of a permanent committee to deal with recurring problems of education and to audit programs that have been initiated." It was signed by Francis M. Betts III, Delores Brishon, Malcolm Campbell, Mary E. Coleman, Richard S. Dunn, Robert Epstein, Caroline Golab, Neville R. Kellenbach, Howard Lesnick, Thomas Reiner, James F. Ross, and Morris Mendelson, Chairman. Dissenting were William Adams and Cedric C. Clark. A successor committee under Anthony C. F. Wallace specifically studied and recommended strengthening the Universities-Related Schools Program in West Philadelphia—an interinstitutional program which was later terminated by a former District Superintendent of Schools when a continuing source of support could not be identified.—Ed.
Report of the Ad Hoc Senate Committee
on Academic Priorities

December 15, 1972

SUMMARY
Recommendations on Administrative
and Organizational Matters

1. We support the Development Commission's recommendation for Planning and Review Committees within each School, with elected faculty members to constitute a large proportion of the membership of each committee. We recommend that the evaluations of graduate groups by the Review Committee of the Graduate School be given very substantial weight in determining admissions and fellowship aid for those groups and in decisions to phase out groups that may have outlived their usefulness.

2. We recommend that, before the establishment of a University Review Committee and an Academic Development Board, as proposed by the Development Commission, there be a careful examination of the appropriate relationship of these bodies to the Academic Planning Committee and to each other. The proliferation of groups with overlapping areas of responsibility tends to undermine the authority of all of them.

3. We support the Development Commission's proposal for the establishment of a University Task Force charged with developing a mechanism to strengthen the interactions among our professional Schools in the area of public policy and to coordinate the activities of these Schools insofar as they deal with various aspects of those large social problems that transcend the competence of any individual School.

4. We support the Development Commission's perception of an urgent need for more intensive study of the financial and other problems of the five Schools in the health areas, and in particular of the two hospitals. Because these problems and their solutions may be interrelated and because we feel it important to strengthen the interactions among these Schools, we recommend a single task force to be concerned with the entire medical and paramedical complex.

5. We support the Development Commission's proposal for a University Task Force to make recommendations for strengthening programs in the Engineering area, both academically and financially.

6. With respect to fiscal matters we support the Development Commission's recommendations that the University require the net cost of auxiliary enterprises (dining service, residences, book store) to be reduced to zero over the next three years and that the University cease any subvention of the direct costs of the two hospitals.

7. We support the Development Commission's concept of fiscal targets for each School, based on the relationship of income to cost. However, we recommend:
   a. That costs be so measured as to include all expenditures that are essentially inseparable from the educational function of the School and that can be brought substantially under the control of its Dean; and
   b. That financial aid not be netted against tuition for the undergraduate Schools, since these Schools do not control their own admissions or the amount of aid granted to their students and since it seems inappropriate to penalize a School such as the College because it attracts an unusually high proportion of low-income students; and
   c. That, if a School is unable to meet its target without real sacrifice of quality, an exemption may be justified on the grounds either of unusual excellence or of unusual contributions to other academic programs within the University, with the burden of proof falling upon the School.

8. We support the general policy of requiring all Schools to meet a rather modest fiscal target within three years.

9. We recommend that a University Task Force be established to review our present expenditures for general administration and expense and for the Department of Intercollegiate Athletics and to set appropriate fiscal guidelines.

10. We support the Development Commission's recommendation for an internally financed Academic Development Fund which would be used for planning, for new programs in their initial stages or for improvements in existing programs.

11. We recommend that the Development Commission's proposals regarding appointment, tenure and retirement policies for the faculty be referred to the ad hoc Senate Committee on the Faculty, which is currently considering a number of closely related issues and which will report at the regular spring meeting of the Senate.

Recommendations on Academic Policy

12. We support the Development Commission in assigning highest priority to the following:
   a. Maintenance and achievement of high-quality programs in the areas of knowledge most central to the University.
   b. Achievement of preeminence in a limited number of disciplines or interdisciplinary areas.
   c. Development of promising new intellectual areas.
   d. Improvement of the undergraduate educational experience, especially during the freshman and sophomore years, and recruitment of more undergraduates with top academic credentials.

13. To improve the educational experience of freshmen and sophomores we recommend:
   a. That a limited number of chairs primarily associated with teaching skills and responsibilities be established to attract and reward lecturers with the special talents required for effectiveness in very large classes. Appointments to these chairs might be for a limited period of time.
   b. That teaching assistants be far more carefully selected, trained and supervised than they now are.
   c. That substantial contact with full-time faculty in small classes be available to freshmen and sophomores, with the use of teaching assistants correspondingly reduced.
   d. That some resources be devoted to searching for areas in which some type of audio-visual device can be used to increase the effectiveness of teaching effort.
14. We support the UDC proposal for a University Scholars Program (early specialization, submatriculation in graduate or graduate-professional Schools, combined degrees with reduced time requirements) because it provides a unique and attractive option for the able, strongly motivated student, extends the fruitful interactions between the liberal arts and the professions that have characterized this University, and opens the resources of our distinguished graduate-professional Schools to undergraduates.

15. We support experimentation with other educational options and innovative programs for undergraduates as recommended by the Development Commission, subject to the following provisions:

a. That an excessive proportion of our resources should not be devoted to experimental programs at any given time;

b. That increased flexibility and independence for the student should not be accompanied by faculty abdication of the certification function. More, rather than less, stringent examination by the faculty of student achievement will be required;

c. That each experiment should embody a viable and detailed plan for evaluation and comparison with traditional programs, in terms of its contribution to the student's subsequent performance in undergraduate, graduate or professional school or in his vocation;

d. That each experiment be limited in scale until there has been sufficient time for reasonably full evaluation.

16. We support the Development Commission's proposal for a significant increase in Benjamin Franklin scholarships, but believe that it is of far greater importance to increase the attractiveness of the programs offered these scholars.

17. We support the Development Commission's recommendation that very substantial effort be directed toward increasing the number of endowed fellowships for GSAS students. We recommend that these be used primarily to strengthen those areas in which we determine to seek international preeminence, those disciplines central to the University which currently fall short of the quality which we wish to establish throughout the academic core and any promising new areas we may undertake to develop. Such fellowships should also be used to support other graduate programs of high quality where existing excellence is jeopardized by the sharp decline that has occurred in both internal and external funding of fellowship aid.

18. We support the Development Commission's recommendation that high priority be given to a very significant increase in endowed professorships. However, we do not subscribe to their dichotomy between undergraduate and graduate chairs or to the proportion of the new chairs they would allocate for particular purposes. Apart from a limited number of chairs with primary orientation toward teaching skills and responsibilities, we would recommend that the new endowed professorships be used to attract outside scholars, or reward inside scholars, who enhance the areas to be promoted to professorships be used to attract outside scholars, or reward inside scholars, who enhance the areas to be promoted to international preeminence or the central disciplines in need of strengthening or who will give impetus to program development in promising new areas in which we decide to become involved.

For the most part appointment to these chairs should be for life, but chairs providing one year appointments for distinguished visitors would also be appropriate.

REPORT

December 12, 1972

The interim report of this Committee (May 12, 1972), which addresses itself to broad premises and basic strategy, begins with the following paragraph:

A reassessment of the University's long-term goals is overdue and our present financial crisis has forced this upon us with considerable immediacy. The focus should be upon raising the quality of the University and this requires not only that we identify and seize upon promising new directions for growth but also that we reexamine the soundness of our basic academic core, making whatever improvements are needed there. Furthermore, we must undertake—throughout the University—either to eliminate areas of mediocrity or to provide them with sufficient resources for the achievement of good quality.

We find it entirely consistent with these premises to support the Development Commission in assigning high priority, both in fund-raising efforts and in the reallocation of existing resources, to:

1. Maintenance and achievement of high-quality programs in the areas of knowledge central to the University. It is understood that high quality entails good teaching at both the undergraduate and graduate levels, in addition to distinguished research.

2. Achievement of preeminence in a limited number of disciplines or interdisciplinary areas.

3. Development of promising new intellectual areas.

4. Improvement of the undergraduate educational experience, especially during the freshman and sophomore years where improvement seems most necessary, and recruitment of more undergraduates with top academic credentials.

5. Improvement, over a more extended time dimension, of any programs which are currently of low quality and which the University has, or will have, determined to retain.

In addition, we wish to emphasize that the momentum for planning, evaluation and discussion which has been generated by the Development Commission should not be lost. These must become part of the University's way of life, if we are to meet the problems as yet unresolved, and even those as yet unrecognized.

PREREQUISITES FOR IMPLEMENTATION

In the interim report, we indicated that in order to implement our broad priorities and to achieve the most significant growth feasible within the constraint of our resources—actual and potential—it is essential to have more adequate measures of both the quality and the cost of existing programs, as well as accurate estimates of the potential of proposed new projects. The decision as to which existing programs are to be significantly strengthened and which new programs are to be initiated is of fundamental importance. It must be based on valid data and subject to the most careful procedures for review.

We strongly commend the recent development by the Associate Provost of reasonably accurate figures on expense and income by School. While these remain open to dispute on detail, they provide for the first time a meaningful basis for coherent long-range planning.

Continuing Review of Quality. Improved measures of program quality are more difficult to develop. Both internal and external comparisons are important but probably must remain largely subjective, but it is essential to obtain and to give the heaviest weight to the views of those who are both expert and reasonably disinterested, since incorrect assessments could damage programs of quality or jeopardize those that have already begun a process of upgrading. In addition, certain objective data are relevant.

We commend the Academic Planning Committee for an important first step in addressing this question. The APC questionnaire provides data on a number of criteria of excellence. While no weighting system is proposed and while some of the criteria are more relevant to some disciplines than to others, nevertheless, we believe it will be possible on the basis of these data to distinguish two categories: those departments or graduate groups which are clearly above the median of the appropriate reference group within the University by most or all of the criteria available and those which are clearly below the median by most or all of these criteria. It is to be expected that most programs will fall in an intermediate range between these two extremes, which nevertheless have strategic significance for our planning efforts. The first category offers candidates for promotion to international preeminence, while a choice should be made either to improve or discontinue those in the second group.

The Academic Planning questionnaire is, however, only a first step; and evaluation in greater depth is required on a continuing
basis. We support the recommendation of the Development Commission work team on Graduate Programs for academic review and planning committees within each School charged with the "examination of its various departments and programs (graduate and undergraduate) to determine their quality and effectiveness, including such things as their teaching contribution, research, the quality and reputation of the appropriate academic degrees and their usefulness to the School, the University, and the academic community in general."

This review is of particular importance for the Graduate School of Arts and Sciences for a number of reasons. First, the achievement of two of the listed priorities—high quality in the intellectual areas central to the University and preeminence in selected disciplines—require that there be excellent graduate programs, though not necessarily large ones, in the areas involved. Second, the Graduate School is the only appropriate instrument for reviewing the large number of graduate groups that cross School boundaries and for maintaining approximate equality of standards for graduate programs across Schools. Third, graduate programs are relatively expensive. This high cost can readily be justified in the case of excellent graduate programs, both in terms of the generalized benefits to society of significant contributions to knowledge and the training of scholars of real potential and also in terms of the benefits to our own undergraduate teaching of attracting outstanding faculty who could not be attracted and retained in the absence of a good graduate program. However, in the case of mediocre graduate programs, these benefits do not apply and the high cost is very difficult to justify. The Graduate School has long provided an invaluable mechanism for innovation and experimentation with new intellectual directions, and it is essential that it should also have an orderly and effective procedure for eliminating programs that may have outlived their usefulness.

We agree with the observation of the UDC work team on Graduate Programs that the reviews of graduate programs by the quadrant Committees in Instruction have not, in general, been effective in producing significant changes where these were needed. We believe that the review process, especially at the graduate level, must continue to be primarily a faculty function, with outside consultants utilized when appropriate. However, if a Committee of the Graduate School Faculty is to take its evaluation function seriously, it must be assured that its findings will have a substantial impact, through the Vice Provost for Graduate Studies and Research and ultimately the Provost, on the allocation of graduate admissions and fellowships and of resources for graduate teaching within the University. It was the recommendation of the Eliot Committee on Organization of the Faculties that the Vice Provost for Graduate Studies have responsibility for advising the Provost on these matters. It was further recommended that members of the review.ing committee be given half-time relief from teaching.

We are not convinced that these proposals are sufficient to ensure effective review, but support them as tending in an urgently important direction and look forward to seeing them implemented promptly.

Identification of the Academic Core. To implement the priority of maintaining and achieving high quality throughout the academic core, it is necessary to identify the components of that core. As noted in our interim report, there are two senses in which an area of knowledge may be central to the University. First, it may be essential to the educational development of the individual student. There would probably be widespread agreement that mathematics, English and history are central in this sense. Alternatively, a discipline may be considered central because a number of other areas of knowledge are intellectually dependent on that discipline. Interactions of this type can be identified to some extent from the APC questionnaire, which requests each chairman of a department or graduate group to identify those areas of knowledge outside his own that contribute most significantly to his own field.

By providing evidence both on centrality and on present quality, the APC questionnaire gives us a starting point for improvement of the academic core. Of particular interest is the question asking each chairman to indicate disciplines outside his own from which the potential, though not actual, contributions to his field might be greatest. A department's actual contributions may, of course, fall short of potential either because of a program of mediocre quality or because the department, while strong, has chosen to specialize along lines not particularly compatible with the needs of related departments. Both situations may well require correction, but different approaches are indicated in the two cases.

The data supplied by the APC can only be a starting point; however, subjective judgments must be made in the end by top administration with the advice of the Academic Planning Committee, which should incorporate information from the Academic Review Committees of individual Schools to the extent that such information is available.

Criteria for Promotion to Preeminence. To implement the achievement of preeminence in selected disciplines or interdisciplinary areas, it is necessary to identify the most promising fields to be so promoted. We support the criteria proposed by the work team on Graduate Programs of the Development Commission, which are listed below in somewhat abbreviated form:

1. The potential for significant creative work in the area.
2. The existence of a high present level of excellence in the area at this University.
3. The extent to which the area is unique.
4. Potential contributions which the advance of knowledge in the area may be expected to make toward the solution of urgent problems facing our society now and in the foreseeable future.
5. Whether the area is an important intellectual thrust in national measures.
6. The potential availability of outstanding new faculty in the area.

A reasonable level of student demand is also necessary, but given a high potential for creative work and for contributions to the solution of urgent social problems, as well as excellence in our existing program, it is hard to imagine that student demand will not be forthcoming. The existence of outside funds to support a thrust to preeminence would be viewed as an additional favorable factor but would not replace the above criteria. It is expected that scholars will lead and funding groups will support, not vice versa.

The selection of promising new intellectual areas to be developed should be justified in terms of each the same set of criteria, except that in 2 the emphasis should now be placed on the high competence of existing faculty who would be interested in devoting some part of their effort to the new program.

Again final decisions must be made by the top administration with the advice of the Academic Planning Committee, which may wish to establish subcommittees for the study of individual programs and must be given adequate staff support for such study.

PRINCIPLES OF REALLOCATION

Since academic programs are the raison d'être of the University, we consider first the possibility of reducing costs or limiting their rate of increase in the nonacademic sectors.

Nonacademic Sectors. We support the Development Commission's proposal that the subvention of auxiliary enterprises (dining service, residences, book store) be reduced to zero over the next three years.

We further support the proposal that no further subvention of the direct costs of either of the two hospitals be undertaken by the University. If the School of Medicine finds the operation of the hospitals to be essential to its educational function, it must accept responsibility for any deficit in the meeting of direct costs out of income.

We support the proposal that expenditures for operations and maintenance should not be reduced below the current level, since there are indications that past under-maintenance is at the root of some of our present difficulties. However, this support is contingent upon a commitment to give urgent priority to determining (a) whether better service can be obtained for the present cost and (b) whether significant improvements in service can be obtained by a modest increase in expenditures.

General Administration and Expense: Intercollegiate Athletics. With respect to general administration and expense and also as
regards the Department of Intercollegiate Athletics, we find ourselves without the necessary information to form even a tentative judgment as to whether the expenditures for these purposes are too high or too low. At the present time, these expenditures have not been adequately scrutinized with respect to their costs and their benefits. For instance, the portion of full faculty salaries which are paid to instructors given a reduced teaching schedule to compensate for time spent in administration and, conversely, the teaching done by full-time administrators fully salaried on administration budgets may well be lost in reckoning the costs of general administration. In the case of Intercollegiate Athletics, it seems reasonable to seek remedies whereby this department can reduce its deficit, just as Schools are asked to reduce their deficits. Since, however, the DIA does not generate income through tuition, a different method of meeting costs should be explored through the presumptive source of outside gifts. A note of caution should be sounded by making clear that the solicitation of gifts for this purpose does not enjoy a high academic priority.

We recommend that a task force of faculty, administrators and students be charged with the study of general administration and expense and also of the Department of Intercollegiate Athletics to ascertain costs and benefits and in particular to explore the options by which the DIA may become more nearly self-supporting. In addition to attempts to increase the income generated, consideration should be given to reducing the number of sports in which we undertake intercollegiate competition. Comparison with similar educational institutions for which cost and income data on a reasonably comparable basis can be obtained may be an appropriate avenue to assessment of our own situation.

Targets for Academic Sectors. With respect to the subvention of academic programs, we subscribe fully to the Development Commission's concern over the fact that a number of Schools of the University failed to meet even their own direct costs out of net income in the fiscal year 1971 or 1972, or both. We agree that guidelines should be set up requiring all Schools to move in the direction of becoming more nearly self-supporting. We have no reservations, however, about the particular short-run target proposed by the Commission: that within three years all Schools be required to meet direct costs out of net income. We believe that an equally stringent but more equitable standard is available, which would bring incentives to bear on the fiscal problem in a more appropriate way.

In measuring a School's net income, scholarships and fellowships provided to students enrolled in that School out of unrestricted University funds are subtracted from total tuition earned (calculated on the basis of course units taught). Since the undergraduate Schools do not control the amount of scholarship aid granted their students, it seems undesirable to base the targets set for them on income net of this grant. Nor does it seem fair to penalize a School such as the College because it attracts a relatively high proportion of its students from low-income families. We would prefer to see the decision as to volume of undergraduate aid remain at the central University level, with the subsidization of low-income students treated as an institutional commitment of the entire University and aid therefore charged against general income rather than charged unevenly against the various undergraduate Schools on a basis not subject to their control.

Further, we believe that it is desirable that the volume of fellowship aid in Graduate Arts and Sciences remain a central University decision and that this aid be charged against undistributed University income.

Financial aid for graduate-professional students out of funds not controlled by the individual Schools raises somewhat different questions. In the first place, admissions are under the control of the individual graduate-professional Schools, which may, at their option, take ability to pay into consideration in the admissions decision or offer admission without aid. Secondly, for another group of graduate-professional Schools governmentally financed scholarships are relatively abundant. We would favor some limited allocation of central University funds to subsidize low-income students in these Schools, with aid in excess of this allocation netted against the School's tuition income.

Turning to the cost calculation, there are several characteristics of direct costs—a number of indirect costs that can be allocated among Schools in a plausible way and that represent expenditures essentially inseparable from the educational function of the individual Schools. For example, a School may reasonably be charged for library acquisitions requested by that School and for operational expenditures of the libraries in proportions to utilization by the School's faculty and students. Similarly, a School may reasonably be charged with the operation and maintenance expense associated with the building or buildings which it occupies. The costs of the Admissions Office and most of the Division of Student Affairs may appropriately be charged against the various undergraduate Schools in proportion to the number of undergraduates enrolled.

We recommend as an appropriate long-range target that each School meet its direct plus assignable indirect costs out of income gross of financial aid (or of some minimum level of aid which is to be supported by the central University), with the following important qualifications:

1. In the short run (i.e. over the next three years), we recommend that Schools be required to meet only 90 to 95% of this target. Our present information suggests that a target within this range would generate about the same level of savings as the Development Commission's target of meeting 100% of direct costs out of net income.

2. Efforts should be made to bring the indirect costs assignable to a School substantially under the control of its Dean. It is a basic organizational principle that direct costs be effective without authority. Similarly, the tuition of graduate-professional Schools should be set by the individual School, subject to the approval of the Provost and the President with the advice of the Budget Committee, as the Development Commission proposes.

3. In some cases, it may not be feasible, even in the long run, for a School to meet its target fully without real sacrifice of quality. In such cases, continuing University subvention may be justified on the grounds of a number of unusual contributions to other academic programs within the University. Temporary subvention may, of course, be claimed by new programs on the grounds that they must have a reasonable period of time to establish themselves or by existing programs on the grounds of what is believed to be a transitory decline in student interest or in the availability of external funding for such efforts.

Based on the budget projections for 1972-73 appearing in the Almanac (December 5), the short-run target of meeting 90% of the direct plus assignable indirect costs is currently achieved by all but three Schools in the projected budgets for 1972-73, if the undergraduate Schools and GSAS are not charged for student aid out of unrestricted University funds, if graduate-professional Schools are charged only for aid in excess of 10% of their gross tuition and if in addition each School's contribution to the net cost of auxiliary enterprises is reduced to zero. Another three Schools meet between 90 and 95% of direct plus assignable indirect costs, while six Schools (including both the College and the Graduate School) meet over 100%.

Academic Development Fund. Finally, in order to provide the University with the flexibility necessary to respond to new circumstances and new opportunities, we support the Development Commission's proposal that the savings generated as deficits approach zero be placed in an Academic Development Fund, to be utilized in part within the School and in part on a University-wide basis to finance planning, new programs during their initial stages, or improvements in existing programs, with no commitment of funds to be made for periods exceeding five years. It is far
from clear that a new University body is required to determine how the University-wide fund shall be utilized. If it is determined that such a body is needed, then its faculty members should be nominated to the President by members of the Senate Advisory Committee. The report of such a body and the procedures governing its accountability to the University community should be prescribed by the University Council.

Policy Proposals Regarding Tenure, Appointment and Retirement. A number of proposals are made in the report of the work team on Reallocation as to personnel policies involving faculty. These require much closer examination than the Development Commission has been able to give them. Such questions are traditionally a primary concern of Senate and a number of closely related matters are currently under investigation by the ad hoc Senate Committee on the Faculty. We recommend that the Development Commission's proposals in this area be referred to this Senate Committee, which will be instructed to report at the regular spring meeting of the Senate.

UNDERGRADUATE PROGRAMS

The experience of undergraduates in their final two years appears to be in general a rather satisfactory one. The interested student is able to obtain a diversity of offerings, ordinarily well taught, the really motivated student has available to him advanced seminars, supervised studies, 50 series and even graduate courses. This is patently an area of our strength and should be emphasized.

There is real disquiet, however, at the freshman and sophomore levels. This arises in large degree from the vast size of the basic freshman courses, together with the frequently poor quality of instruction. There is strong resentment at the widespread use of teaching assistants.

We are convinced of the need to improve the quality of educational experience during the first two undergraduate years both through a reduction in class size and through greater exposure of students to full-time faculty, as contrasted with teaching assistants. The responsibility of offering quality teaching to non-majors as well as majors is one which every department must undertake.

Better Teaching for Freshmen and Sophomores. To this end, we recommend the following:

1. Very large classes should be taught only by lecturers who are really effective in this setting. Special talents are required beyond a thorough understanding of one's subject and a capacity for clear and well-organized exposition, which must be expected of all teachers; and these special talents should be carefully utilized and well rewarded. Furthermore, some kinds of subject matter may be less amenable to communication through large-scale lectures. Finally, it is important that very large classes meet in a room well adapted to this purpose.

2. Graduate students who serve as teaching assistants should be selected on the basis of ability and interest, carefully supervised and given some systematic help in developing teaching skills. Where multiple sections of an introductory course are taught by a number of teaching assistants, coordination and supervision of these sections, as well as updating and revision of the course materials, should be in the hands of an experienced faculty member, who should be given a reduction of teaching load in consequence.

3. Substantial contact with full-time faculty in small classes (under 30) should be available to freshmen and sophomores. Each department must determine how best to meet this responsibility in view of the talents and preferences of its members. To the extent feasible, senior as well as junior faculty should be involved. The use of teaching assistants should be correspondingly reduced.

In implementing the first point, the funding of chairs primarily associated with teaching skills and responsibilities, as proposed in the President's January report and the UDC work team on Endowed Professorships, may be very helpful in attracting, developing and rewarding lecturers who are highly effective with large classes. However, an invidious distinction between undergraduate and graduate chairs is to be avoided. Chairholders with unusual teaching skills should teach both undergraduate and graduate classes. Appointments to teaching chairs probably should be for a limited period of time. The number of chairs primarily oriented to teaching and program development should not be unduly high proportion of the total number of chairs sought.

In implementing the second point, serious consideration should be given to a training program aimed at improving the teaching skills of graduate assistants and in some cases junior or even senior faculty. To be widely effective such a program probably should be organized on a School rather than a departmental basis. Perhaps more extensive use should be made of the model found in the history department, where teaching assistants are assigned small classes in an area of their particular expertise (instead of sections of the basic introductory course) and are selected for teaching assignments in terms of their ability, interest and imagination in developing an appropriate topic. To ensure careful selection of teaching assistants who can be expected to perform their duties effectively, responsibility for this selection should be assumed by the departmental faculty or an appropriate subcommittee thereof.

In implementing the third point, more serious resource problems are encountered. If there is to be a significant increase in the contact hours of faculty with undergraduates, then either the number of faculty must be increased or existing faculty members must be released from their teaching and research responsibilities. The holders of new chairs, if they come from outside the University and if they are expected to teach undergraduate as well as graduate students, should provide a significant gain. Diversion of resources from graduate teaching will occur quite naturally in areas where the number of graduate students has declined (especially if in the past the department has depended on graduate assistants to meet its undergraduate teaching responsibilities). But such a decline in graduate admissions is far from typical throughout the University. In fields where the graduate student applicant pool remains strong, the diversion of faculty effort from graduate teaching and research that can be accomplished without encountering serious resistance is probably quite limited.

Two interesting possibilities for utilizing the faculty's teaching effort more effectively have been raised by work teams of the Development Commission. First, it seems desirable to search for areas in which such devices as programmed learning, closed circuit TV or other audio-visual techniques may be effective either as a supplement to, or a partial substitute for, direct personal contact between faculty and students. For certain purposes these techniques have already proved valuable, and we should attempt to determine other effective uses either through our own experiments or analysis of the experience of others or both. Some resources should be devoted to developing and testing such uses.

Of considerable interest are the generation and grading of quantitative problems and the use of programmed learning for supplemental purposes when students are poorly prepared or have difficulty in keeping up with their class.

The second possibility raised is that a student who receives a good deal of individualized or small group attention in his first two years may then be capable of bearing much of the responsibility for his own education during his last two years. To the extent that students in their last two years choose the research option or the option of self-education and examination, as discussed by the UDC work team on Undergraduate Education, this might permit some diversion of faculty effort from the last two undergraduate years to the first two, if in fact the indirect demands on faculty time of the self-education options are quite small.

It seems reasonable that small classes in the freshman and sophomore year will be more useful than large in preparing a student for a considerable degree of self-education in the last two years; but we are not convinced that the amount of faculty effort released by the independent study and research options will be very significant. First, it seems both likely and desirable that a rather small proportion of upper classmen will utilize these options, and then only for a fraction of the course units earned. For the remainder the faculty input requirements remain undiminished. Second, if a faculty member devotes as much as four hours per semester (most of which would be required for adequate evaluation alone) to each of ten students engaged
in independent study or research, the time involved is about equal to the time in class required by a conventional course, which might serve thirty students. If we triple the time in class to allow for preparation, student conferences and the designing and grading of examinations for the conventional class, we find that the demand for faculty time for the independent study is about one-third that of thirty students enrolled in a conventional course, with no saving in faculty commitment per student.

University Scholars Program. One of the proposals of the UDC work team on Undergraduate Education would offer a unique opportunity to our undergraduates through an early specialization option combined with submatriculation in graduate or graduate-professional School during the senior—or even the junior—year. Such a program would bring the resources of our graduate-professional Schools within the reach of undergraduates and would expand significantly the base for fruitful interactions between the professions and the liberal arts which have characterized this University. There is already considerable interest in a combined BA/MA program in some parts of the College and in a combined BS/MBA in Wharton, leading to a blurring of the line between undergraduate and graduate study and to significant economies of time and money for the strongly motivated and able student. The University Scholars Program involves an imaginative extension of the same approach and we support it, though we feel that its details require additional study.

This option should, however, be restricted to students with adequate preparation and a clear and specific career orientation. For others, the first two years should be largely devoted to rounding out basic skills and exploring a variety of areas of knowledge linked to a variety of career alternatives.

There are certain disadvantages, of course, both in narrowing the range of disciplines to which the student is exposed and in limiting the student’s educational experience to a single university for both undergraduate and graduate work. Care should be taken to ensure that a variety of electives outside the major field in later years provide a broadening of intellectual interest, perhaps more effectively than could be done by a variety of introductory courses taken in the first two years.

Other Educational Options and Innovative Programs. Much of the emphasis, both in the President’s proposals of last January and in the report of the Development Commission work team, is on greater flexibility and independence for the undergraduate student and on a wider range of alternative educational patterns. We agree that an important element in quality education is the opportunity for adaptation of program to individual needs and capacities. To the extent that the set of viable alternatives can be extended without increasing cost this is desirable. Where cost increases are significant, the expected advantages must be tested against those promised by other proposed uses of University funds.

We find many of the educational innovations, proposed or already begun, to be imaginative and attractive, though again we feel that the details as outlined require a considerable amount of additional study. In general, we are favorably disposed toward experimentation, subject to the following provisions:

1. That an excessive proportion of our resources should not be devoted to experimental programs at any given time;
2. That increased flexibility and independence for the student should not be accomplished by faculty abdication of the certification function. More—rather than less—stringent examination by the faculty of student achievement will be required;
3. That each experiment should embody a viable and detailed plan for evaluation and comparison with traditional programs, in terms of its contribution to the student’s subsequent performance in undergraduate, graduate or professional school or in his vocation;
4. That each experiment be limited in scale until there has been sufficient time for reasonably full evaluation.

Specific comments on individual proposals follow:

a. The research option; the self-education and examination option; student-taught courses; credit for field work. These should probably be limited to upperclassmen who have provided evidence during their first two years of both their ability and their maturity. In all cases, special concern with procedures for faculty examination and review will be required.

b. Freshman Seminars. It is an essentially appealing idea to supplement a comprehensive introductory course in a discipline with a seminar devoted to investigation of a small segment of that field, suitable as a case study in the use of the techniques and methodology of the discipline. Furthermore, such a seminar serves to balance the large class experience typically available to freshmen with the more individualized faculty-student contact possible only in a small class. The cost per student is, of course, relatively high. Until a careful program of evaluation can be made, judgment as to whether the benefits justify the costs.

c. Colleges of Thematic Studies. Again, there is considerable appeal in the basic idea of bringing a number of disciplines to bear on a significant problem, if only because effective attack upon any of the large problems of our society is very likely to require multidisciplinary cooperation. Again, we see an urgent need for a well-planned program of evaluation. The possibility should be explored that thematic colleges may be more valuable to students in their last two years, after they are firmly grounded in the methodology of one of the disciplines involved, than to freshmen or sophomores who are only superficially acquainted with any discipline and who frequently lack proficiency in the basic intellectual skills on which most disciplines depend, as well as the maturity to carry out a fairly independent program of study. In fact, a College of Thematic Studies may be particularly appropriate for students who, having specialized early, may be stimulated and broadened in their later undergraduate years by contact with students from other specializations, all addressing themselves to a common problem.

d. Educational Programs in Residences. Again, the concept is attractive. Such programs as that now in operation at Van Pelt House broaden the involvement of students with others in the same residence, provide a congenial setting for informal student-faculty contact and enrich the experience of both students and faculty through intellectual interaction with students and faculty in other disciplines. In general, we are more favorably inclined toward the existing living-learning projects with residents drawn from diverse academic areas than toward the proposed projects with residents limited to a single area.

The costs are relatively high—estimated at about $50,000 per college for current expense, or $300 to $350 annually per student served. The benefits are particularly difficult to measure, since they may well not show up in improved performance in the students’ subspecialties and in their general intellectual history, but rather in better adjusted people with a broader range of interests and a greater capacity for enjoyment. We believe the benefits are real; but since a relatively small number of students are served, we would prefer to see the costs shared by the beneficiaries rather than underwritten entirely by the University.

Attracting the Most Able Students. A final problem of deep concern in the area of undergraduate education is the decline we have suffered in applicants with top academic credentials. While this problem is not directly addressed by the Development Commission, we feel that it is of the greatest importance to attract superior applicants.

The President’s proposal to direct some of our fund-raising efforts toward increasing the number of Benjamin Franklin scholarships is a step in the right direction, but adequate financial aid in itself is not enough. It is the students who require aid who can be sure of receiving it wherever they wish to go, while for those who do not qualify on grounds of need, the monetary consideration is irrelevant.

If we are to attract the most able students, it must be through the programs that we offer them. The expanded educational opportunities and the innovative programs described above may well appeal to these students and may be particularly well suited to them. If the offer of a Benjamin Franklin scholarship is to take on real substance, then every effort should be made to accom-
moderate these scholars in the program(s) of their choice. However, we would prefer to avoid the elitist connotations of a program that is reserved exclusively for Benjamin Franklin scholars. Other interested and adequately qualified students should be admitted in substantial numbers. This arrangement lends itself to the kind of systematic evaluation we have recommended for experimental programs, since a program may have either greater or less value for the average student than for the student with high academic credentials. Any valid experimental design in education should control for ability.

An additional attraction to a Benjamin Franklin scholar receiving financial aid might be to offer him, for the self-help component of aid during his last two years, a work-study assignment as research assistant to a promising young faculty member in his own field. The presence of a highly qualified student assistant are no inconsiderable advantage to the faculty member, who would undertake in return to utilize the student in such a way as to provide a genuinely valuable educational experience and who should be graded by the student as to the fulfillment of that commitment. In order to facilitate the matching of students and faculty members of similar interests, a faculty member interested in participating in such an arrangement should establish early contact with entering Benjamin Franklin scholars, perhaps meeting with them at intervals to describe his own past, present and planned research efforts and perhaps performing some academic counseling functions.

**PRODUCTION OF EXCELLENCCE: GRADUATE PROGRAMS, ENDOWED FELLOWSHIPS, ENDOWED PROFESSORSHIPS**

The achievement of excellence in an academic discipline requires, first and above all, an outstanding faculty; and of the greatest attractions we can offer to outstanding faculty (assuming reasonable recompense for their own services in terms of the current market) is an outstanding graduate program or one that is clearly on its way to becoming outstanding. We note that an excellent graduate program is not necessarily a large one, though some minimum size is necessary for effectiveness.

At the present time external funding for fellowships has fallen off drastically, and other universities, like our own, have been forced by financial exigency (or induced by a decline in employment opportunities for Ph.D.'s) to cut back on internal allocations for fellowships. Under these circumstances, very significant improvements in our applicant pool could be achieved at relatively small cost through an increase in fellowship aid, to be funded with new endowment or through reallocation. We recommend that the highest priority be given to raising funds for a number of endowed fellowships both in those disciplines or interdisciplinary areas in which we determine to seek international preeminence and in those disciplines central to the University which currently fall short of the quality we wish to establish throughout the academic core. We support the Development Commission's target of 150 additional endowed fellowships and would propose that these be used primarily to strengthen selected graduate groups in line with the priorities already stated and to support other graduate groups of high quality where existing excellence is jeopardized by the sharp decline in fellowship aid that has been noted.

A second component of major importance for the strengthening of selected disciplines is the establishment of endowed professorships in these areas. We support the Development Commission's target of 20 such professorships to be used primarily to attract outside scholars who will truly enhance the selected areas but also to reward key members of our existing faculty in these and other areas of high quality. These 20 chairs are in addition to those recommended in connection with undergraduate education, which would be oriented primarily toward program development or toward excellence in teaching. In the present case, outstanding research would receive priority over teaching, though the recipients of the new professorships should be strongly encouraged to undertake undergraduate as well as graduate teaching assignments. Clearly this group of professorships should be assigned to permanent rather than short-term holders if the aim of building excellence is to be achieved.

In areas where we aim for international preeminence, the establishment of two or three related chairs may be highly effective in helping to attract the top rank of scholars, through offering them an opportunity to collaborate with others in their field. They would find most complementary to their own efforts and would be oriented primarily toward program development or toward excellence in teaching.

In areas where we wish to establish international stature it would also be desirable to create linkages with other departments of similar stature both in this country and abroad, facilitating interchange of both students and faculty. Several chairs might be reserved for distinguished visitors to encourage such interchange. Appointments would be for one year and would rotate among several disciplines.

The UDC work team's recommendation that, in addition to the emphasis placed on endowed professorships in raising new funds, "the major portion of the Reallocated Development Funds...should be assigned to Endowed Professorships" does not seem to be adequately supported in relation to the competing claims of increased fellowships. For example, however, it might be quite valuable to use some reallocated funds to add to the endowment of certain existing chairs which have remained empty because their endowments are not large enough to provide the compensation required to attract truly distinguished scholars.

Another useful contribution of reallocated funds to the building of excellence would be through providing small research grants for promising junior faculty. The NSF funds available for this purpose have been sharply reduced. A large aggregate amount is not required; but the availability of a reasonable number of such grants contributes very substantially to the morale and productivity of our best assistant professors by permitting them to pursue projects of their own choosing, if they prefer this participation in larger externally funded projects initiated by senior faculty.

Turning from graduate programs of high quality to those of questionable quality, we support the Development Commission's position that the University must bring all programs up to a minimal standard of quality or plan to eliminate them. Unless a strong argument can be made for centrality to the University's purposes or unless other special considerations of substantial weight are present, there is a clear presumption that mediocre graduate programs, once they are identified as such, should be phased out. In the short run, the resources thus freed may appropriately be devoted to an improvement of undergraduate teaching in the field. However, unless graduate demand is growing or there is an opportunity to expand funded research, it may prove desirable in the long run to reduce these resources, allocating the funds thus released to other academic programs.

**PROFESSIONAL SCHOOLS**

Much of the University's strength lies in its outstanding professional Schools, and much of its unique promise arises from the mutually reinforcing interactions between its liberal arts and professional components.

It seems clear that professional Schools which are of high quality and essentially self-supporting should be maintained or expanded. It is equally clear that where neither of these criteria are met the most profound consideration should be given to cost-reducing policies and essentially self-supporting should be maintained or expanded.

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We support the principles of evaluation stated in the report of the work team on Professional Schools.

An excellent professional school should do three things. It should train highly competent practitioners of the profession and prepare them for continuing self-education. It should train excellent teachers to pass on the discipline of the profession to others. Such teachers must be capable of highly competent practice. Firstly, professional schools must engage in scholarly activity aimed at improving the intellectual base and the practice of the profession. The scholarly activity can include research in fundamental areas.

If a School is of high quality, as judged by internal as well as external comparisons and by eminent practitioners as well as eminent scholars, it will attract more students, and if the test scores and rank in undergraduate class of its students compare favorably with those of students in the University's other professional Schools, then continuing subvention may indeed be justified, if this proves necessary to the survival of the School. However, all possibilities for cutting costs in ways which do not entail a serious sacrifice of quality must first have been exhausted. The burden of proof in supporting a claim for special consideration falls upon the School involved.
Task Force on Public Policy Programs. Second only to strengthening the interactions between liberal arts and the professional areas, there is an urgent need to strengthen interactions among the professional Schools, especially in the area of public policy. Public policy with respect to real estate housing is crucial in the areas of architecture and city planning in the School of Fine Arts, and the areas of housing finance, regional science, urban sociology, and public administration in the Wharton School, and upon tax law and important aspects of social work. Public policy with respect to environmental control involves considerations of engineering, economics, public administration and law. Public policy seeking to deal with urban decay must draw from economics, education, social work, demography, criminology, urban finance, city planning, transportation, regional science and public administration.

One of the great challenges of this University at this time is to coordinate the considerable expertise in various aspects of public policy that already exists within our professional Schools and to focus these skills upon the large social problems that transcend the expertise of any individual School. It is troublesome to find an appropriate organizational device for this purpose. Informal arrangements without budgetary authority have proved only partially effective in limited areas for limited periods of time. On the other hand, most of the relevant subject areas have a natural home in the School and the question is whether the School is prepared to divine for itself the resources that would be necessary to house entirely within the new structure, while joint appointments would perhaps solve some of these difficulties, with budgetary reimbursement of the School of primary appointment when a substantial portion of a faculty member's effort is diverted from the programs of that School.

The Development Commission working paper devoted to this question suggests three organizational alternatives: a loosely organized inter-School program reporting to the Provost; a new School of Public Policy; or a new Division of Public Policy within the Wharton School. All three alternatives have disadvantages; but it seems evident that a project of the scope required must control a substantial budget. It further seems likely that given the complexity and importance of the problems addressed and given our existing strength in a number of the component disciplines, substantial funds could be raised for this purpose. The establishment of several endowed professorships with concern for specific areas of public policy and responsibility for program development in these areas might well provide an important impetus.

We recommend that a task force of faculty administrators and students be created to continue the work of the Development Commission toward a coordinated program in public policy, to investigate quite specifically the interest of present faculty members in participating in such a program and the appropriate form of such participation, and to make recommendations regarding organizational structure. It seems plausible that the Fels Institute, the urban affairs program and the energy management program would be housed entirely within the new structure, while joint appointments of interested faculty from Wharton, Engineering, City Planning, Law, Community Medicine, Social Work and Education would encourage the inputs required from these areas.

Task Force for the Health Affairs Area. Very serious and complex problems arise from the trends in revenues and costs of the two hospitals. These hospitals contribute in important ways to the excellence of the School of Medicine, which would be hurt both academically and financially if the University were forced to terminate its ownership.

Further problems arise from the financial situation of the Dental School, which has not consistently met its direct costs, and from the dependence of the Veterinary School on its special appropriation from the State, without which it would generate a substantial direct cost deficit. The Veterinary School is in need of substantial improvement of its clinical facilities, and financing for this purpose must be sought. Both of these Schools are of high quality, though the Dental School has slipped somewhat in its national ranking; and the University must be concerned to maintain or improve this quality, without exposing itself to heavy financial drains.

An additional concern is to develop closer relationships between the Medical School and the Nursing School, the School of Allied Medical Professions and the Dental School. It has been argued that increased interaction might substantially benefit the three latter Schools, and mechanisms for achieving such benefits without undue cost should be sought.

We recommend that a University Task Force be established to consider financial, organizational and other problems within the health affairs area, and we support the proposals of the Development Commission that attention be paid specifically to generating additional interactions between the Dental School and the Medical School and to the feasibility of a School of Health Science Education and Preventive Medicine that would incorporate and strengthen the Schools of Nursing and Allied Medical Professions.

Task Force for Engineering. Substantial financial problems exist in the Engineering area, in part for reasons which may be temporary. In addition, there are problems of uneven quality, though some sectors are of unquestioned excellence. Innovative proposals for future development have been generated and these require examination by a University-wide group in far greater detail than the Development Commission has been able to accord them. We support the Commission's proposal that a University Task Force be appointed for this purpose.

Jamsheed Ghandi  Lewis Pizer
Peter Nowell  David White
Robert Palmer, Chairman  Jean Crockett, ex officio

NOTE: Irwin Friend, who resigned from this committee in September because of the pressure of other business, has been kind enough to read this report and indicates his concurrence.

COUNCIL

TEMPORARY EXCLUSION OF FACULTY

At its December 13 meeting, Council passed the recommendations contained in the following report of the Senate Committee on Academic Freedom and Responsibility:

Several years ago the Provost asked the Senate Committee on Academic Freedom and Responsibility to re-examine the present rule dealing with revised rules on temporary exclusion of faculty members from University facilities.

Paragraph C (2) (e) of the Procedures Relating to Academic Tenure at the University of Pennsylvania now provides:

A Faculty Member shall not be suspended during proceedings involving him unless immediate harm to himself or others is threatened by his continuance. Any such suspension shall be with salary.

The Senate Committee proposed that Paragraph C (2) (e) be revised to read as follows:

(e) Temporary exclusion.

(i) The standard. If the capacity of a faculty member to perform his duties in his normal manner has been seriously impaired, he may be temporarily excluded from classes, laboratories and other equipment to the extent necessary to prevent substantial harm to person or equipment. Any such exclusion shall not affect compensation.

(ii) Procedures.

(A) Who determines. Where immediate physical harm to persons or to property is threatened, the determination to exclude under paragraph (e) (i) may be made by a Dean or Director of a faculty or during a period of emergency while it is impossible to contact a Dean or Director, by a faculty member or administrator in immediate charge of the classroom, laboratory or other University premises or property. In any other case a Dean or Director of a faculty may exclude a member of the faculty only in accordance with the recommendation of the standing Faculty Committee on Academic Freedom and Responsibility. If less than two members of the Faculty Committee are available, the Dean or Director of a Faculty may act. As soon as two or more members of the Faculty Committee are available the matter shall be submitted to the Committee for determination.

(B) Notification. Any exclusion for more than a day shall be re-
GUIDELINES FOR SALARY INCREASES

FOR A-1, A-3, AND A-4 EMPLOYEES

January 9, 1973

The University's salary scales for administrative, technical, and clerical employees (at present those on the A-1 and A-3 payrolls) consist of a minimum salary and a maximum for each grade in the position classification structure. Although a formal scale has not been issued for hourly-rated employees not represented by unions (A-4 payroll), their salaries are administered according to the A-3 salary scale, converted to an hourly basis.

These scales apply in determining salaries in case of employment, promotion, demotion, reclassification and merit review. In all cases the salary to be granted the employee must be agreed upon by the employee's supervisor and a representative of the Personnel Department before the employee is informed of the proposed salary action. In addition, the approval of the Salary Classification Committee is required for a proposed merit increase of 5% for the grade. In no case is an employee's salary to be raised above the maximum for the grade.

Employment is normally at the minimum salary for the grade. The starting salary may be set above the minimum but not above the midpoint if education and experience are substantially greater than normally required for the position as stated in the job description. However, employment at above-minimum salaries should occur only in exceptional cases. Otherwise, insufficient range will be available for future merit increases.

Promotion may occur as the result of (1) transfer to a different, higher level position or (2) reclassification of the position to which the employee is currently assigned. In cases of promotion, a salary increase is normally granted provided, of course, the employee's current salary is within the salary range of the new position.

Salary treatment in case of demotion requires case-by-case consideration in discussion between a representative of the department and a representative of the Personnel Department.

Merit salary increases are considered annually based upon the quality of performance of the employee since the last increase.

—James J. Keller, Director of Personnel Services

ERRATA

In the additions to committee lists (Almanac, December 19), the name of Dr. Sae-il Chun was misspelled. Dr. Chun is Assistant Professor of Physical Medicine and Rehabilitation.

JOB OPENINGS

SUPPLEMENT TO BULLETIN #488, Updated 1/9/73

ASSISTANT HEALTH PHYSICIST for Radiation Safety Committee.

Qualifications: Graduation from a recognized college or university plus advanced degree. At least 2 years' experience in the field of radiological health. Familiarity with radiation measurements and methods. Salary Range: Open

CYTOLOGY TECHNICIAN III to work independently and assist in research program.

Qualifications: Biology background and 6 months of specific training in cytology. Registration as a cytology technician by the American Society of Clinical Pathologists and/or at least 4 years' direct experience as a cytology technician. Salary Range: $7700-$9700

ELECTRONICS TECHNICIAN III for engineering school on campus.

Qualifications: Ability to test, calibrate and repair equipment as required; to construct lab set-ups and assist instructors when necessary. Technical high school or graduation from an approved technical course. Salary Range: $8100-$10,300

EXECUTIVE ASSISTANT TO DIRECTOR OF LEONARD DAVIS INSTITUTE (part-time, beginning July, 1973) to be responsible for organizing programs in Health Care Administration, development and administration of recruiting programs, placement of students in administrative internships, development of alumni continuing education programs. Responsible for administration of the advanced management program.

Qualifications: Graduation from a graduate program in health care administration (MBA, MHA). At least two years administrative experience in health care programs. Salary Range: $1100-$1,500 per week

LIBRARY BUILDING ADMINISTRATOR to be responsible for the maintenance, security, safety and physical operations of the library complex.

Qualifications: Graduation from an approved college or university. At least three years' related managerial experience. Understanding of maintenance procedures applicable to structural systems. Salary Range: $9900-$12,300

PHYSICAL LABORATORY TECHNICIAN III to work in research on thin film evaporation, single crystal growth, heat treating and material preparation.

Qualifications: Prefer B.S. in material science and/or some laboratory experience in chemistry, physics and metallurgy. Salary Range: $6400-$8200

SENIOR SYSTEMS ANALYST for a campus office; to conduct feasibility and cost/benefit analysis of systems; define inter-relationships and links between systems and coordinate the design of such systems in all areas of the University. To investigate new techniques for implementation in the processing and reporting of information and controlling of projects.

Qualifications: Degree plus 5 years' direct systems analysis and design experience, or high school plus some college and 8 to 10 years of direct experience. Ability to advise on complex and diverse systems. Ability to work well with all management levels. Salary Range: Open

Those interested should contact the Employment Section of the Personnel Services Department (Ext. 7285) for an interview appointment. Inquiries by present employees concerning job openings are treated confidentially by the Personnel Office.

RESIDENCE COUNSELING

Interested and qualified graduate students are encouraged to apply for counseling positions available in the Residential Life staff programs. The Graduate Studies Bulletin outlines some of the details of these positions and direct inquiries to the Office of Residential Life, 3533 Locust Walk, Ext. 7515. Deadline for applications is February 1.
We announce with sorrow the death of Dr. Roy F. Nichols, Emeritus Professor of History, on January 11. Mrs. Nichols asks contributions to the Nichols Fund in lieu of flowers. Details of a memorial service, incomplete at press time, may be had from the Office of the Chaplain, Ext. 8456.

**SENATE**

CONTEST FOR MEMBERSHIP ON NOMINATING COMMITTEE

Senate Secretary E. J. Lawson Soulsby has mailed ballots to the full membership for the election of the seven-member Senate Nominating Committee. The filing of a nomination by petition makes it necessary, under Senate by-laws, to submit to a vote the Senate Advisory Committee's slate of seven along with the name of the candidate nominated by petition.

Voting is non cumulative, and all ballots must be returned by January 29 to Dr. Soulsby at W-35 Dietrich Hall. Ballots received after that date will not be counted. The eight candidates for the seven positions are:

- SAC Slate: John S. deCani, Professor of Statistics/O.R.; Louis A. Girfalco, Director, Metallurgy & Mtls. Science; Madeleine Joullie, Associate Professor of Chemistry; Richard V. Kadison, Professor of Mathematics; Phoebe S. Leboy, Associate Professor of Biochemistry (Dental); John D. Minyard, Assistant Professor of Classical Studies; and David T. Rowlands, Professor of Pathology.
- Nominated by petition: James C. Shelburne, Assistant Professor of Medicine.

The Senate Nominating Committee will be responsible for proposing a slate for 1973-74 at least 42 days before the April 18 Spring Meeting. Dr. Soulsby has invited the Senate membership to suggest candidates for the ten offices to be filled for the terms indicated:

- Chairman-Elect of the Faculty Senate (1 yr.): Incumbent: Paul J. Taubman
- Secretary-Elect of the Faculty Senate (1 yr.): Incumbent: Stephen A. Ross
- Four Members of the Senate Advisory Committee (3 yrs.): Incumbents: Harold S. Ginsberg, Michael H. Jameson, Paul Rezin, Hace Tidhler
- Two Members of the Senate Advisory Committee (1 yr.): Incumbents: Maria Z. Brooks, Bernard F. Cataldo
- Two Members of the Senate Committee on Academic Freedom and Responsibility (3 yrs.): Incumbents: Stuart W. Churchill, Donald N. Langenberg
- Two Members of the Senate Committee on Academic Freedom and Responsibility (3 yrs.): Incumbents: Stuart W. Churchill, Donald N. Langenberg

Suggestions should be sent to Dr. Soulsby at W-35 Dietrich Hall for transmission to the Nominating Committee, when elected. Supporting letters may accompany the suggestions if desired.

**A-3 ASSEMBLY: JANUARY 18**

Thursday's planning and review sessions of the A-3 Assembly will begin at 12 noon and be repeated at 1 p.m. to allow A-3's a choice of hours to attend. Members will form discussion groups on job classification, retirement benefits, preventive medicine and other topics. Open to all A-3's, in Houston Hall Auditorium.

**WHY WAR: JANUARY 23**

Lt. Col. Faris Kirkland's talk on his research in aggression, "Why War," is sponsored by the Faculty Tea Club next Tuesday in Dietrich Library Conference Room.

**DEATHS**

**GEORGE WILLIAM TAYLOR: 1901-1972**

Labor leaders and members of the Department of Labor joined the University in paying tribute to Dr. George W. Taylor, who died December 16 at the age of 71. He was the subject of editorials in the New York Times and the Philadelphia Evening Bulletin. In the "Business Outlook" column of the December 27 Philadelphia Inquirer, J. A. Livingston wrote: "Taylor has been preeminent in labor mediation and arbitration over a 40-year period, going back to the bloody days of organizing strikes . . . He was graced with a rare affability . . . And he was supreme as a philosophical pragmatist." "He is truly a giant—a man whose contributions to industrial peace are unsurpassed in the nation's history," retiring Labor Secretary James Hodgson telegraphed Mrs. Taylor.

A native Philadelphian and 1923 alumnus of the Wharton School, Dr. Taylor taught at Wharton since he received his doctorate there in 1929. Professor of industry—and of one of the first courses in labor relations—he was Gaylord Harnwell Distinguished Professor at his retirement last year and gave his name to the Taylor Arbitration Fund of the Wharton School. Among "Taylor-made men" who are now labor mediators are former Secretary of Labor W. Willard Wirtz; William E. Simkin, former head of the Federal Mediation and Conciliation Service; and two college presidents.

Dr. Taylor had served five presidents as a special consultant. In the 1930's, he wrote the first minimum wage law; during World War II he was chairman of the National War Labor Board. President Eisenhower appointed him chairman of the board of inquiry for the 1959 steel strike. New York State's Taylor law concerning labor relations of public employees is based on his recommendations. Dr. Taylor is the author of the first grievance arbitration clause, as well as several books and many articles. As the first full-time umpire between General Motors and the United Auto Workers, he ruled on some 2,000 disputes. Robben W. Fleming, President of the University of Michigan, noted Dr. Taylor's "singular innovative and imaginative capacity to see where settlement was likely to come out in the interest of the parties and the nation."

The recipient of the Philadelphia Award and the Pennsylvania Medal of Merit, Dr. Taylor was given the Presidential Medal of Freedom by President Kennedy.

Memorials may be made in his name to the Taylor Arbitration Fund in Vance Hall.

**NATALIE ASHMED (November 13 at 70),** Library Assistant from 1962 until 1968. Both Miss Ashmead and her sister Margaret came to the University in 1946 and were members of the library staff until their retirement.

**BEVERLEY M. BUDER (November 26 at 47),** candidate for the master's degree in city planning, she would have completed her work in May.

**JOHN T. DILLON (November 16 at 70),** a janitor here for 20 years until 1969.

**DR. EDWARD LODHOLZ (December 6 at 97),** Emeritus Professor of Physiology. He was Isaac Ott Professor of Physiology in the Graduate School of Medicine from 1920 until 1946 and had held appointments in both the Medical and Veterinary schools since 1900. A graduate of the School of Medicine in 1897, he received the University's Outstanding Alumni Award.

**GEORGE J. MOLZ (October 21 at 63),** an electrical operator in the Buildings and Grounds Department since 1965.