"ASSAYING A UNIVERSITY"

The basis of this document is the Report of the President of the University of Pennsylvania for 1959 which was largely concerned with the Educational Survey. To this report have been added information and comment reflecting the Survey's continuing significance within the University as of June 1960.
FOREWORD

The past six years have been particularly meaningful at the University of Pennsylvania because of the pervasive self-study which has been going on, its genesis having been in studies initiated by the Trustees which evolved into a formalized framework known as The Educational Survey. Although major and supplementary studies of the Survey have been issued, debated within our councils, and acted upon continuously during this period, the Survey officially concluded its task in the spring of 1960 with submission of a five-volume summary report. "Assaying a University" appeared originally in 1959 as The Report of the President of the University; it is intended to reflect the significance and impact of this thoroughgoing self-appraisal upon the present and future of the University of Pennsylvania.

It is not difficult for a university to play its role as the custodian of the academic traditions of a society, for this is very congenial to faculty temperament and is a conservative function according well with the teaching and training activities of the more elementary phases of the educational system. Universities, however, have another responsibility more difficult to discharge and one which calls for the exercise of enterprise and initiative. This requires the breaking with tradition in order to respond to growth in knowledge and to the continuing evolution of social forms and customs. It is not enough to conduct established instructional programs, for the acknowledgment of research as an essential component of education implies that instruction must change and keep pace. As the attitude of our nation toward higher education matures, it becomes incumbent upon institutions continuously to evaluate their objectives, assess the policies being pursued toward objectives, and improve their techniques for implementing these policies. Only thus will the universities serve society adequately in their essential functions.

The exercise of critical judgment presents a difficult problem to a democratic academic community wherein the individual participants are themselves the most competent evaluators of detailed performance. Success cannot be assessed by profit or loss or any extension of the technique of the balance sheet which is common in industry; the success of the pattern can be appraised only by the eventual significance of current research and by the performance of students many years after their attendance at the university. One must currently rely upon whatever evaluative procedures may be devised to assure that the participants, both teachers and students, are outstanding in their quality of present achievement and give high promise of future performance, and also that the contributing circumstances in the form of curricula, facilities, and general support are those most conducive to the objectives of the undertaking.
The responsibility of an independent, gift-supported university in this regard is particularly great, for it enjoys a freedom of action and opportunity which can be justified only by a commensurate demonstration of intellectual curiosity and academic enterprise. In order that the spirit of the teachers may rise to the opportunities presented, it is essential that the faculty should itself be the primary participant in setting the educational pattern of the institution. Of course, the faculty must have available the advice of its colleagues in neighboring institutions and appropriate specialists in all related occupations and professions. However, the faculty itself must assume the full responsibility for an evolving program which is firmly based upon the hard-earned knowledge won by its predecessors and truly directed toward the most significant and pressing needs of the generation of society it serves.

In assessing the merits and demerits of an organization and its program, one's first tendency is to focus upon the daily or monthly problems that are constantly to the fore in current operations. But these matters tend more often to be superficial and to be ultimately adjudged of lesser significance. It is rather incumbent upon the university to take a more considered look and to explore its corporate functioning more deeply if the ultimate program is to bear the scrutiny of years and of decades. It is all too easy to become entranced by the numerology of hours and credits; academic bookkeeping insidiously acquires a significance of its own quite aside from the learning process it is devised to serve. The titles of courses and the arrangement of them in curricula carry a false aura of substantiability and appear to be of value in themselves.

The broadening vista of knowledge and the scholarly desire to treat this expanding area encyclopedically deflect attention from the basic objectives of a university and from the men, both teachers and students, who comprise the institution. Only a serious study extended in time and coverage and conducted by knowledgeable, skilled, and perceptive individuals can refocus attention upon the inspiration to learn as the paramount objective and upon the provision of those particular circumstances within the scholarly community that are conducive to this end. The product will not be a completely educated man at the end of four years; it must be recognized that this can not be achieved in any finite number of years, and that our objective must rather be to produce the man who has won from his university environment an intellectual trust and an avidity for learning that will project him into a life of increasing responsibilities and achievements.
In the words of the Survey Director, "Pennsylvania, like any university, is the product and, in some degree, the captive of its history. It has grown for a period of over two hundred years, adding here, adding there, rarely contracting its programs. Once, for ten years, it was a state university and it still receives generous support from the State. In spirit, however, it is a privately-supported institution with a deep sense of public mission and a strong faith in the prerogatives of independence. A university, as such, has a never-ending obligation to greater excellence. Universities are the apex of the educational pyramid and carry the supreme responsibility. For them to spawn mediocrity in today's world is tantamount to condemning the whole educational system to mediocrity."

The authors of a recently published scholarly work dealing with the academic labor market* suggest that the methods of social research have been applied by university professors to every important American institution except their own; that aside from a few pioneer studies of the academic profession, most of the general writings about higher education have not been based upon empirical data; and that while there have been innumerable studies of local problems in local settings, few of them have ever seen print and in fact many are regarded as secret documents.

There were several such studies conducted in our own University during the present century. The trend of events in 1924 caused the Trustees to authorize a general survey by outside investigators of finances, administration, education, and social life. The distinguished University historian Edward Potts Cheyney observed that "an interesting report was presented which has, unfortunately, had less influence than might have been hoped." Again, during the last World War, a faculty committee undertook a three-year study of educational policy and planning. The resulting report suggested a number of searching questions and concrete proposals which received renewed attention and elaboration in the recent Survey.

The circumstances at Pennsylvania in 1953 gave a special timeliness to self-study and criticism. Under the late Justice Owen J. Roberts, the Trustees initiated a modest appraisal of educational policy, administration and athletics. The latter two areas were surveyed within the year but the study of educational policy proved to be such a vast subject that it was confined to pilot examinations of three departments; the decision was then made to proceed with a thorough-going study of education and research. An initial grant for this purpose was received early in 1954 from the Fund for the Advancement of Education.** During the ensuing five years, under the inspired direction of Dr. Joseph H. Willits, former Dean of the Wharton School and

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**Total gifts and grants from 17 sources have amounted to $700,385.
more recently Director for the Social Sciences of The Rockefeller Foundation, Professor Malcolm G. Preston of the Psychology Department, and Mrs. Julia M. H. Carson, there has been consummated an enterprise described by the authors of The Academic Marketplace as perhaps the most distinguished and certainly the best organized of all such ventures.

Procedures and Method

The Educational Survey was given complete freedom in discharging its responsibility and it has reported directly to the President. It has had neither legislative nor judicial authority; ultimate decision on any recommendations rests with the faculty, the administration, and the Trustees. Therefore, no invasion of academic freedom has been involved. The Survey has proffered whatever it wished in analysis, ideas, criticisms and suggestions. It has been left to the faculty and administration to consider the offerings; to adopt some; reject others or, hopefully, to design something better.

The Survey was assisted by a Faculty Advisory Committee appointed by the President who consulted with the University Senate. Its members were chosen widely from the various Schools of the University, but it was not, in any technical sense, a representative body. The Committee served in three ways: it received oral reports of the progress of studies enabling it to function in a liaison capacity with the faculty as a whole; it provided a forum for the discussion of studies and for criticism of their conclusions; and it evaluated studies through the mechanism of sub-committees. Its executive group advised the Survey on all proposals for studies and for major personnel to conduct them.

Some indication of the extent of participation by the faculty in the Survey is reflected in the approximately 300 individuals who served on committees or worked on studies. Beyond this, many additional faculty members were engaged in analyzing, supplementing, controverting or in formulating alternative suggestions. Two of the prime achievements have been the stimulation of wide interest and lively discussion of findings and recommendations and, more important, a searching questioning of existing programs and the assumptions on which they have been based. In addition to the faculty, 126 outside consultants and advisers, eminent in their several fields, were drawn into the deliberations.

In general, studies have involved five stages:

1. Preparation by a faculty committee of each School surveyed of a list of questions which it was hoped the study would answer.

2. Drafting of a report by the outside consultants, who had a completely free hand in their work.
3. Consideration of this report by a faculty review and appraisal committee, with minority representation from the School or department being studied, and formulation of a report endorsing or supplementing the outsider's report but in no case changing the text itself.

4. Submission of both reports to the Faculty Advisory Committee.

5. On the basis of these reports and recommendations and of their own findings, submission by Survey officers of final recommendations to the President.

At this point, the Survey's work on individual studies was completed, and the administration has then carried the matter forward under a procedure which insures widest consideration by all those having a relevant interest. This includes:

1. Referral of reports to the Educational Policy Committee of the faculty and referral by it to the Educational Council or the Senate if there are major policy questions to be resolved.

2. Referral through the Provost of reports to the parts of the University to which they apply, requesting a statement on attitudes and plans for implementation.

3. Review of accumulated materials by the President and transmittal of his recommendations to the appropriate subdivision for implementation of decisions not previously acted upon. (Through local participation in the study by members of the pertinent faculty, the resulting recommendations were, in many cases, actually put into effect in their original or modified form prior to completion of this procedure.)

4. Referral to the Trustees of final Survey reports and a digest of all materials relating to studies on which action by them is required.

By the end of the academic year 1959-60, the President had received all 28 major reports, essentially all of which had been considered by the Educational Policy Committee and referred for information, debate, or action to the Educational Council. On a number of matters the Committee has believed that it could not formulate sound recommendations until the final report of the Survey Director had been received. Action has also been deferred on some questions where it was believed that further study was required or where relevant studies were already in progress. As a result, some of the most vital and controversial proposals of the Survey are continuing to receive consideration.

All reports were referred by the Provost to the appropriate
Schools, and in most instances official faculty reaction has been formulated. It can thus be seen that the studies are at various stages of assimilation and implementation within the University structure. This process has gone on steadily since the submission of the Survey’s first report on January 23, 1957.

In the case of certain recommendations an assessment of priorities among the many meritorious claims for University resources must be made before corrective action can be undertaken. Assistance in making such decisions is available in the considered views and recommendations of the Director in his final report and in the deliberations of several faculty-Trustee-administration committees which are now engaged in formulating a long-range integrated development plan for the University.

Scope of the Studies

Pennsylvania is a multi-purpose university, and the Survey was organized in terms of the functions of the institution, as follows: (1) A center for undergraduate education; (2) A center for graduate education in the arts and sciences*; and (3) A center for professional education*. In addition, certain studies relevant to the University as a whole were undertaken.

In the opinion of Dr. Willits, the most significant thing about the Survey is that it occurred at all: "I am not aware of any other case where a whole university — Trustees, administration, and faculty — have submitted themselves to outside independent scrutiny of such a thorough-going and comprehensive character. The next most important point is not the studies but the spirit induced on the campus by the fact that the studies were going on and the wave of improvements which came about even before reports were formally submitted."

These laudatory words on the part of an independent observer of rich experience and distinction are deeply appreciated. The remarkable esprit de corps which has permeated the University during this self-examination is a tribute to the wisdom and insight of its Director and his colleagues.

*Considered as an integral element of these functions is the responsibility of the University to serve as a center for research and scholarly inquiry and, to a lesser degree, as a center which provides specialized services to diverse geographic and professional communities.
The great dimensions of this self-appraisal in terms of personnel have already been described. The written end-product is of like proportions, especially if account is taken of numerous special studies which supplement principal reports. When placed side by side, the original materials forwarded to the President measure four feet across; the five-volume summary itself contains nearly 1500 pages. I cite these statistics to emphasize the fact that this brief overview can do no more than point to fundamental issues and describe changes emanating from the Survey which are of particular consequence to the total University picture.

University Press

In points of time, it is appropriate to refer initially to the first study completed, that of the University Press. In 1954, the situation of the Press was financially so critical that the Survey committee was asked both to formulate an interim policy which would hold losses at a pre-established amount and to consider a long-range policy of operation. The findings of the committee resulted in a reorganized Press, predicated upon a two-year trial basis, which has since proven to constitute a unique but very satisfactory and economical solution. The 23 new titles published last year represented the largest output of hardbound full-length books within a single year in the history of the Press; sales again exceeded $100,000. The Press has been able to undertake the publication of every manuscript presented by the faculty editorial committee, and it maintains a healthy collaboration with the Oxford University Press of London.

Undergraduate Education

In the matter of growth, a clear consensus developed for giving priority to the maintenance and improvement of the quality and promise of the student body, looking toward only such an increase in size as would be in consonance with this major objective and would not unduly tax the personnel or physical resources of the University.

Historically, the natural sciences and the humanities have formed the area of responsibility of the College faculty, while the principal social sciences, excluding history and anthropology, have been included, together with business subjects, in the Wharton School. This fact has had major implications for the development of these two principal subdivisions in the undergraduate area. The separation of the social sciences from the College has tended to raise certain artificial barriers between disciplines and, on the other hand, their inclusion in the Wharton School has contributed great academic strength to business curricula.
The historic fact of fragmentation into eight undergraduate faculties presents one of the major problems in the future integration of undergraduate educational experience at the University. A proposal was drawn up in 1957 calling for the formation of a council of the baccalaureate faculties to administer the undergraduate educational programs. This proposal has now been approved after thorough consideration by the responsible deliberative bodies. Meanwhile, the Schools of Civil and Mechanical Engineering have been merged to constitute a single school.

The virtues of coordinate education as practiced in the College and the College for Women, as opposed to coeducational education, received careful consideration in the Survey, and the administration was convinced of the desirability of maintaining the present formal structure. This was affirmed by the Educational Council, with the provision that the faculty of the College for Women be reconstituted from among those members of the faculty of the College and the other undergraduate schools who have a particular concern for the problems of the education of women, this small and more homogeneous group will be revitalized in the study of its area of responsibility.

The study of undergraduate education in the liberal arts and sciences pointed to many areas requiring attention. Among these are programs for gifted students and student-faculty relationships. It urged that the gifted student be identified early, given special guidance and opportunities, and extended to the limits of his ability. In the College, an advanced placement program has been set up for the purpose of encouraging and advising students entering the University with college credit earned in pre-college courses. At the same time, the College faculty has approved the framework for a new general honors program, which it is hoped will bring opportunity for independent work by gifted students in the College and set inspiring standards for undergraduate education as a whole. Finally, the honors major programs in departments of the College are undergoing serious review, to the end that superior students during their junior and senior years may be presented with an integrated and stimulating plan of study in their major fields of concentration.

The Survey further suggested that the academic bookkeeping of semester credits and examinations for the establishment of student standing should be revised or even abolished, thereby destroying the fiction that education and learning are identical with grades and credit. It urged a more effective transition from the secondary school to college and emphasis upon learning rather than teaching, with continuing attention devoted to composition, languages, and communication. It pointed to a placing of greater responsibility upon the students themselves for their education and for the organization of their activities, both curricular and extra-curricular.
The Instruction Committee of the College has undertaken a thorough study of those courses of a general nature offered in the various disciplines and departments for the purpose of introducing students not majoring in those disciplines to any given field of study. Department chairmen have been asked for information on such existing courses and plans for new courses and for their opinion as to the relationship of such courses to the major programs and to the aims of liberal education.

In essence, the Survey study recommended that there should be a strong college at the center of the University with a bold and imaginative liberal arts curriculum. These matters can be facilitated by the coordinated efforts of the Offices of the Provost and the Vice-President for Student Affairs and the Council of the Baccalaureate Faculties.

It is probably safe to say that in no segment of the American educational system is dissatisfaction with existing practice as widespread and as deep as in the area of collegiate business education. Two nationwide studies sponsored by the Carnegie and Ford Foundations provide a bill of particulars for this generalization. The Survey report on the Wharton School emphasized that the mission of this School is to furnish a high quality of education for responsibility in government and in business. There should be a sharp break with the proprietary trade school tendency which has characterized many undergraduate business schools; the training function should be made subsidiary to the broad educational opportunity. Specifically, it has been suggested that the proportion of studies in the liberal arts and sciences which are of general interest and utility to undergraduate students throughout the University should be increased as nearly as possible to the equivalent of three years of academic work. These studies would include a stronger emphasis on the concepts and methods of natural science and more emphasis, too, on the humanities. This recommendation assumes that the natural science program will be designed for non-majors and will consist chiefly of the history, philosophy, and significance of science.

The Educational Council expressed itself as favoring a degree program in business education which places more emphasis on the student with superior capacity and increases the demands made on the student for problem solving and the various uses of knowledge. It was recognized that the material of a liberal education in this area is not limited to the traditional social sciences, but that courses in such fields as finance, industry, and geography could provide equal educational breadth if suffused with the liberal academic tradition.

In 1959-60 the Wharton faculty approved in principle a proposal prepared by a special curriculum committee calling for major revision of the undergraduate course of study. The new program, specific courses for which are now being worked out, has been viewed as having these three facets: general education, general business education,
and intensive business education. It is hoped that the new curriculum can be introduced in the year 1961-62.

The School of Education study presented certain points in common with that of the Wharton School. It urged that instruction in pedagogy be liberated from any narrowly professional concept, and that in drawing closer to the best philosophy and practice of liberal education, it might furnish unique teacher training services to the other undergraduate areas and itself profit greatly by this close association. Revisions in the curricula of the School have served substantially to accomplish this objective in that about 85 per cent of the preparation of secondary school teachers and over 75 per cent of the preparation of elementary school teachers is carried out in departments of the College.

In accordance with a recommendation of the Educational Council, the College faculty has made it possible for students planning to teach in the public schools to prepare for the provisional teaching certificate, an arrangement which has prevailed in the College for Women for many years. It is believed that it will soon become possible to provide opportunity for practice teaching to liberal arts students, under the auspices of the University, without serious conflict with the senior conference course.

In the case of the School of Allied Medical Professions, attention was likewise called to the desirability of a broad base of liberal education to accompany the more specialized studies in preparation for a professional career. The Educational Council affirmed subsequently that efforts should be concentrated upon the maintenance of a strong bachelor's degree program, because it is only upon such a background that advanced study and research can be built. The faculty has been concerned with various curricular changes, particularly in the oral hygiene program, which seek to bring the educational program in line with this concept. The centralization in 1959 of the four divisions of the School into a single home on the campus has benefited the instructional program as well as the morale of both students and staff.

The same point of view was evident in the report on the Engineering Schools, and indeed the engineering faculties have been moving since 1955 toward the inclusion of more work in the natural and social sciences and the humanities. The extension of the curriculum to include engineering sciences, as contrasted to the practice of engineering, has evolved to the point where last year's graduating seniors were exposed completely to these changes. There is increasing evidence that the new engineering curricula represent a prototype toward which other schools are reacting with similar programs.

In consonance with recommendations of the study of the School of Fine Arts, the Educational Council affirmed that this division become a graduate professional school composed of departments in architecture, city planning, landscape architecture, and the fine arts, and of two research institutes devoted to urban studies and architecture. This change was implemented last year through discontinuance of the existing baccalaureate programs in design, city
planning, and music; and transfer of the History of Art Department to the College, the Music Department from the Graduate School of Arts and Sciences to the College, and the undergraduate major in architecture to the College. The coordinated program with The Pennsylvania Academy of the Fine Arts will be continued. This leaves the School currently with undergraduate curricula only in architectural engineering and the fine arts; the Fine Arts faculty has recommended changes in these two programs which will parallel the new six-year program in architecture, to be effective in 1960-61. The Educational Council further expressed itself as favoring a place for the creative artist in the life of the University and the need for a center for the arts as a focal point of cultural performances.

Increased consideration is being given to the complex and evolving area of nursing education within the University. The four-year degree program provides the broadest base upon which to develop higher education for this profession. There is an important continuing need as well for the training of the bedside nurse, and the standards of accomplishment here must respond to the broadening vistas of medicine. There must also be graduate specialization for the supervision of corps of nurses, for the nurse as an educator of the public, and for the nurse as an educator of other nurses. Such branches of the profession increasingly require a broader base of general scholarship and professional competence, and it is the function of the University to provide the matrix within which nursing education may evolve and mature to the fulfillment of the opportunities which lie before it.

An initial step has been taken to assure the fuller use of University resources by the School of Nursing through assumption of the teaching of certain basic science courses by members of the science faculties. Plans are underway for withdrawing the General Nursing Program in which registered nurses are now enrolled. Thereafter, as recommended by the Survey, graduates of hospital schools will be admitted to the basic baccalaureate program at the level for which they are qualified.

The Survey also gave particular attention to certain groups of academic departments. The strengthening of psychology was urged, for instance, and the administration moved rapidly in this direction through appointment of an able scholar to fill the vacant department chairmanship. The focus of scholarly interest within the department was subsequently recast, and an entirely new undergraduate curriculum has been introduced.

In the area of the physical sciences, attention was directed to, and the Educational Council affirmed, the need for added support and the enhancement of the faculties in geology and astronomy, as well as for increased cooperation with corresponding departments in neighboring institutions.
The emphasis of mathematics at Pennsylvania has been in the field of pure mathematics, and the department's relationship with fields of application in the natural and social sciences has not been intimate. It was urged that such connections be fostered in order both to strengthen these related departments and to stimulate the Department of Mathematics; in particular, closer liaison was suggested between the many and varied areas of statistical interests throughout the University and the Department of Mathematics. The extensive growth of computing and data handling centers on the campus was pointed to as another phenomenon which strongly suggests the desirability of closer coordination with one another, with departments requiring their services, and with the central interests of the mathematics faculty.

The place of modern languages in the curriculum has been strengthened through creation of a language laboratory. It is of interest also that enrollment in elementary Russian courses has undergone a 500 per cent increase, a reaction no doubt to fuller knowledge of Russian educational and scientific achievements. A curriculum for teachers of Russian has been introduced in the School of Education, and a new program in Russian History has been inaugurated in collaboration with a center that was recently established in the Department of Slavic Languages and Literatures.

In summary, the Survey Director suggests that undergraduate education at Pennsylvania should rest upon the following pillars:

1. Two and one-half to three years of a high quality of liberal education for all baccalaureate candidates.

2. Emphasis in professional studies on the fundamentals and on those skills having wide applicability rather than on technicianship.

3. Development of disciplined intellectual power rather than the acquisition and regurgitation of information.

4. Emphasis on the principle that the ability and ambition to continue education throughout life is equal in importance to the current acquisition of knowledge.

Graduate Education

The unique responsibility of a university is in the graduate and professional areas, including those of research and clinical services. The Graduate School of Arts and Sciences, having the chief concern for the basic disciplines, is central to all graduate and professional effort at the University. At its best, it serves to unify all postgraduate education, and the Survey has pointed to the need for strengthening our graduate effort and for integrating it with the
activities of the professional schools. These matters received further attention in three conferences held in observance of the Graduate School's seventy-fifth anniversary.

The Graduate School of Arts and Sciences is particularly concerned with meeting the need for teachers in colleges and universities, and here the conflicting requirements on numbers and quality present a most difficult problem. In this regard consideration by the Educational Council centered upon certain major questions of educational policy, including the following:

1. Continuance of the M.A. and M.S. degrees as terminal degrees for professional advancement in various fields, and as appropriate intermediate degrees for many students who can devote only part-time to continuing advanced study.

2. A sustained concept of the Ph.D. as a degree demonstrating not only that an individual has achieved a mature understanding of a field of knowledge but also that he has a broad understanding of other fields so as to assure him a sense of the unity of learning. Further, that he has, through his research, acquired the methods of science and scholarship.

3. Possible creation of a special advanced degree for persons who demonstrate the necessary scholarly qualifications for teaching at college level, but who do not necessarily fulfill the research requirement expected for the Ph.D. degree. This would represent an effective response to the insistent need for more persons in college teaching and preserve the true purpose of the Ph.D. degree.

In all divisions of the Graduate School, there is need for the application of larger resources for salaries, research, books, fellowships, leaves of absence and travel, as well as for more adequate facilities for communal life among graduate students. The Educational Council has recommended that the allocation of University funds for the support of faculty research in the Graduate School be increased and that its distribution among the disciplines should favor the humanities, thereby recognizing the comparative disadvantage of this area in competing for funds from outside sources. As expressed by the Survey Director: "At first blush, the contemporary world may seem to be a poor place for humanists. The values broadly called 'humanistic' may be edged aside by powerful thrusts from many directions. Under such stresses, teachers of humanities are often tempted to forgo the spirit of humanism, to seek the narrowly practical, to become cynical. However, the present does not call for defeatism, much less for cynicism. It is a time for greatness and, on that foundation, a time for resourcefulness."

This point of view, understandable as it is, must of course be tempered by the realization that the evolution of knowledge may well
bring with it certain modifications in those factors on which the judgments affecting the allocation of funds at the disposal of a university are based. The objective cannot be to maintain a static pattern or to endeavor to redress historical balances but rather to stimulate and support those members of the university community who have demonstrated their ability to lead significant and productive effort in whatever field their interest may lie. The scientific method has contributed much and will doubtless contribute more in the areas of the humanities and human behavior, and the sciences themselves can be approached in a very broad and humanistic way reflecting their growth as the central and most representative cultural component in contemporary civilization.

The Survey suggested that study of the social sciences has suffered by having been the last of the basic areas to enter the University curricula. Behavioral studies also suffer innately from the intractability of their data, from their inherently subjective nature upon which objective methods graft with dubious viability, from the aura of emotion and prejudice that besets discussion of them, and from the insistent popular demand that useful answers be forthcoming. The behavioral faculties at Pennsylvania have responded vigorously to the challenge which the Survey presented and are determined to assume leadership in this important field. In addition to concurring in the specific proposals relating to financial support, faculty personnel, and organization of curricula in the social sciences, the Educational Council also recommended continuation of a single department of economics, with further elaboration of graduate studies to be carried out by the Graduate School Council, and a development in breadth and depth in the field of geography.

Reference has already been made to proposed changes in geology, astronomy and mathematics. In terms of the physical sciences as a whole, the Survey affirmed their supremely important position at Pennsylvania, noting that the contemporary university has no choice but to find such resources and take such steps as to maintain great strength in these departments. It pointed out that the work in physics has been strengthened appreciably during the past 20 years, as have the efforts in chemistry and astronomy during the past half decade. Meanwhile the position of these sciences in comparable institutions has rapidly advanced. Our growth potential in several of these disciplines is considered to be notably high. To capitalize on this potential will require increased amounts of flexible money for research; additional physical space; and enlarged staffs, particularly in view of a greater emphasis upon the physical sciences in the undergraduate curricula. The new chemistry building which was opened in 1960 is serving to alleviate in part a critical need for space.

Graduate study in the biological sciences was considered in reports on medicine, dentistry, and veterinary medicine, and through
specialized studies of psychology and biology. These have led to creation of a Division of Biology which is serving to enhance relationships and the development of curricula in biology, botany, microbiology, and zoology, heretofore separate departments. Construction will commence in the near future of a modern building for biology; this will assure intimate coordination with investigative work in the adjacent new medical research laboratories.

The Wharton School and the Schools of Fine Arts, Engineering, Nursing, and Education have extensive responsibilities in graduate as well as in undergraduate education. The programs for technical degrees in some of these areas can supplement the work of the Graduate School of Arts and Sciences and, conversely, by maintenance of a close relationship, the Ph.D. programs can strengthen the professional curricula. The opportunities for such beneficial mutual interaction at Pennsylvania are great, and it is essential that the faculties take full advantage of them, both to maintain the stature of the professional degrees and to draw upon the vigor of professional programs in broadening the academic purview of the Graduate School.

The new library building, now under construction, and a projected Graduate Studies Center, should serve substantially to enhance opportunities throughout the area of graduate education and research.

Research

In his final report, the Survey Director deals at some length with the University as a center for research and scholarly inquiry, the "cutting edge" of the University. In brief, he suggests that they should be viewed not only as handmaidens to teaching but as ends in themselves; and that teaching and research are not competitive, but mutually dependent if the spirit of men be right, for research without teaching often lacks stimulus, and teaching without research tends to dry up. Specifically, he points to certain essential bases for research:

1. An atmosphere which makes men feel that true scholarship is appreciated by colleagues and administration and that a desire to help exists.

2. Complete freedom in the choice and prosecution of projects.

3. Clearly articulated policies by those in responsible positions as to the place and importance of such pursuits in the University's program.

4. Effective organizational and personnel procedures which will discover research talent and its needs.

5. Favorable working conditions, including adequate time, laboratories, libraries, and funds.
The Survey found that Pennsylvania's scientists and scholars have a creditable record in expanding the horizons of truth and knowledge, although there is unevenness among the schools and departments in their present strengths. In terms of dollar support, a great imbalance exists among the various areas of knowledge; at the same time, over 90 percent of the support for research comes from outside organizations, generally on a short-term basis. The need for "hard money" representing endowment is therefore apparent. Remedial measures which are proposed call for the creation of an administrative chain of command, starting with the department chairmen, which is able and alert to scholarly and scientific needs; of a University council on research which would establish policy, organization, and procedure; and of a Pennsylvania research foundation which would endeavor to attract and accumulate free research money from all possible sources, thereby serving to stabilize the center of gravity of research policy within the University.

A major step toward the accomplishment of these objectives was taken in 1960 through establishment of a University Council on Research as an advisory body to the administration upon policy matters. The Council will concern itself with the health of the research component of the University's educational mission, with the fostering of attitudes among the faculties conducive to the furtherance of research and the increase in its qualitative excellence, and with the nature of the administrative structure which can most effectively promote research objectives within the University.

The concluding thought expressed by Dr. Willits on the subject of research is worthy of quotation:

"Great scholars and scientists are animated by a common passion—to extend the boundaries of knowledge. In earlier days, research was a very personal affair. In spite of the extensive organization today of group effort, good research must always have an intensely personal aspect. That is vital. The good research man feels the inherent beauty of the phenomena he is studying and the elegance of the means by which the object of his study is explored. He will have a sense of order and a passion for clarity. And he will have had very good training. His contagious spirit will communicate itself to his colleagues and especially to younger men.

"To develop such men, to find others, and to provide assistance and a congenial climate for their labors—this is a prime privilege of a university and of potential donors with imagination to perceive the real monuments they can help to build. And the University should cherish the memories of those great men who have built and are building Pennsylvania's scientific and scholarly tradition.

"When a person appears who has proved himself to have great talent, who is wedded to a topic that will occupy his
lifetime and that offers meaningful promise, then the University would do well to treat such a person as the exception he is and seek funds for support and freedom on a ten- or twenty-year basis. Such a prescription will not fit many persons. It would be reassuring to think that Pennsylvania would be ready to ignore the democratic idea that all faculty members should be treated alike and encourage more examples of research in the grand tradition. The meaningfulness of research would be advanced by such ventures and the trivial would be discouraged."

The level of expenditure for sponsored research and training projects conducted by the University in 1959-60 totalled over $10,000,000.

**Professional Education**

Such schools as those of Social Work and Law and Medicine are concerned exclusively with professional work at an advanced level. The School of Social Work benefited particularly from the recommendations of the Survey, and its fiftieth anniversary year saw a continued improvement in its program and in the students and faculty participating in it. There has been a growing integration of the School within the University complex, although a major need is its relocation upon the campus in order that it may participate more fully in the total academic atmosphere. This will be realized upon erection of a Social Sciences Center within the next few years.

The Survey found the Law School enjoying robust academic health within the accepted canon of legal education. There is a fine corporate spirit among faculty and students and a demonstrated capacity for effective self-government. It shares with the rest of the University a need for greater resources for plant, faculty activities, and student aid. The focusing of attention upon these important matters has been most helpful, and the Dean and alumni are actively engaged in seeking to enlist additional financial aid. In an obiter dictum, the Survey officers noted that other areas of the University might learn from the teaching methods of the Law School, where a favorable salary structure, low cost, large numbers of students, and excellent educational performance have been successfully combined. They suggested that the lesson to be learned in other divisions is that dedication to instruction may be combined with more efficient teaching techniques in such a way as to provide a most effective education with an economy in the hours devoted to didactic exposition and a gain in the benefits to the more gifted students.

The School of Medicine at the University is the first of our professional schools and the oldest school of its kind in the country. Clustered about it are a Graduate School of Medicine and Schools of Veterinary Medicine, Dentistry, Nursing, and Allied Medical Professions.
The Survey cited the Medical School as ranking with the leading centers of medical education in the country, commending it highly among divisions of the University. Such excellence, the Survey suggested, warrants a strong determination by the University administration not only to maintain but to improve this position. As in the case of the Law School, additional funds are required for plant, faculty, and students; but the pattern of medical education, being in a greater state of flux than that of legal education, presents a number of other problems as well.

One of these is the integration of the educational program with the clinical facilities of the hospitals owned by or affiliated with the University. Another problem is the remuneration of members of the clinical staff. Here the pattern varies widely, and continuing study and a number of ultimate adjustments are essential if the educational values are to be kept constantly to the fore and the ablest clinicians retained to participate in instruction. Adequate remuneration of persons in the pre-clinical area presents a separate problem and one upon which a number of helpful suggestions were made. Another need is the development of relations between medicine and the social sciences, particularly as they pertain to questions on financing the rising costs of medical care, education, and research, and to the social factors affecting health. The problems of the Graduate School of Medicine are closely parallel to those of the School of Medicine, and the continued drawing together of these two schools will contribute to a sharing of their strengths and joint action toward the solution of their common problems.

Residential and recreational facilities for students in the medical schools are another great need; a program must be undertaken to provide them at the earliest possible date. Research has been greatly enhanced through construction of the Alfred Newton Richards Medical Research Building and the Henry L. Bockus Laboratory. Other important additions to physical plant in medicine either completed or underway are the George Morris Piersol Rehabilitation Center, the I.S. Ravdin Institute (in-patient addition), and a residence for nurses.

The Schools of Dentistry and Veterinary Medicine have enjoyed intimate and helpful relations with the University's schools of medicine, the School of Veterinary Medicine being unique as one of two private schools in the country and the only one intimately associated with a medical school. This offers unusual opportunities for its faculty to establish not only a distinguished and effective program in veterinary medicine but to contribute substantially to the health sciences program of the University at large. The requirements for creation of a Veterinary Sciences Center were clearly set forth by the Survey, and the financing program for the growth of the School got well under way during its seventy-fifth anniversary year.
The Dental School, with a distinguished tradition and reputation, has been handicapped somewhat through a disparity between the number of students it has attracted and the resources which it enjoys. The great needs here are for additional financial support and an enhanced research program; the Survey has served an important function in focusing the University's attention upon these essential goals for the future. Initial steps in this direction have been taken through construction of a research building and the successful beginning of a capital fund campaign.

Graduate work in Nursing and the Allied Medical Professions is somewhat less in magnitude than in the other medical areas, but in accordance with the Survey's recommendations the direction of growth should be such as to encourage a broader conception and a higher quality of the programs of these Schools.

Certain of the other undergraduate schools provide substantial programs at the graduate level. In the case of the School of Fine Arts, mention has already been made of its movement toward a graduate professional school offering advanced degrees in architecture, city planning, landscape architecture, and the fine arts.

The Wharton Graduate Division and the Fels Institute of Local and State Government are strong elements in the Wharton program. The recommendations for change in the undergraduate curriculum are predicated upon continuation of these programs, with possibly a greater emphasis placed upon study of the administrative process and of the making of policy decisions. At the same time, we must determine whether the School's future contribution to professional education should be made primarily in the collegiate and immediate post-graduate years or whether serious emphasis should also be given to educational programs for men who have had considerable experience in business or government and who by virtue of this can maturely undertake advanced programs in the study of administrative and management problems.

Graduate work in the Engineering Schools was accorded particular attention by the Survey, and a synthesis of the recommendations is that the Schools should gradually transfer their energies from part-time evening programs to a strong day-time educational program with research made a more integral activity with the academic operations. Efforts should also be made to use the extensive resources of the Schools for undertaking special programs with industry, thereby providing valuable professional experience for faculty members. Recent events reflect progress along these lines. The seven programs leading to the Master of Science degrees have continued to attract an increasing number of students. More significant, however, is the fact that there has been a sharp increase in the number of full-time students. Since these M.S. degree candidates are a primary source of students
who continue on to the Ph.D., the increase in recent years portends a large doctorate output in the near future.

A development of increasing importance has been the interest of industry in having employees spend a significant amount of their time in graduate engineering work at the University. Several years ago an arrangement was made with the Radio Corporation of America and the General Electric Company wherein selected employees with the B.S. degree are afforded the opportunity to undertake graduate studies at the University to the extent of at least two full days per week.

Survey recommendations pertaining to graduate programs in the School of Education have led to a review of curricula which has already brought a complete revision of the work in educational administration; new programs in secondary and elementary education will likely emerge as well. Thought is being given to suggestions that the aim of the Master's degree work should be the preparation of master teachers, and in fact a program designed for master teachers was introduced in 1960. There is the additional question of whether all graduate programs should include substantial academic content, with preparation for administrative responsibilities postponed until a later period.

In summary, the Survey officers find that professional education is a deeply embedded part of Pennsylvania's tradition, that there is a creditable foundation on which to build, and that our obligation is a heavy one in view of society's growing demand for a higher level of professional competence in more and more fields and in ever increasing numbers. Certain policy factors are recognized:

1. Liberal education and professional education in the University need to be examined as one whole, devoted to the training of men for the professions and for the life they are to lead.

2. The store of knowledge now is so immense, the expansion of knowledge so rapid, and the rate of obsolescence so swift that much of the knowledge acquired in a university may be quickly outmoded. Professional men must be prepared, therefore, to adapt to novel circumstances from the beginning to the end of their careers and to acquire early an attitude of seeking new knowledge throughout life.

3. A single university should specialize, concentrating its efforts in limited areas if it hopes to achieve high quality. A division of labor at advanced levels among universities should be conscientiously sought.

4. To be accepted as a proper subject for professional education a field should possess or give convincing promise of acquiring: a body of established and communicable knowledge;
significant research opportunities and capacities; opportunities for formal advanced training in basic as well as in applied areas; a dedication to the public service that may be expressed in a formal code or may only be in process of emerging as approved practice; and the requisite public sanctions.

5. It is the proper business of a university to aid and press its schools on toward ever more mature professional status, so that truly professional education rather than mere technicianship shall be achieved.
THE HUMAN PARTICIPANTS

In the course of the Survey the student body, the faculty, and the Trustees were all given separate consideration. The only major University group which was not studied was the alumni body, and the integration of this group within the University complex is a continuing charge upon the administration. A positive step in this direction has been taken through adoption by the Trustees and the General Alumni Society of a program designed to energize the potential of the more than 100,000 alumni throughout the world.

The Faculty

A particularly fine report on the faculty by Dr. Richard H. Shryock, formerly of The Johns Hopkins University and now at Pennsylvania, set forth the balance of authority and responsibility devolving upon the faculty within an American university. The able report of Professor David R. Goddard's Review and Appraisal Committee presents a practical code of policy and practice in our efforts to strengthen and develop faculty personnel. The growing sense of unity among the faculties of the University is leading to more adequate assumption of responsibilities and more effective exercise of the authorities associated with them. The Survey emphasized the need for fostering distinguished academic performance through provision of facilities, adequate remuneration, and a congenial and inspiring campus atmosphere. In this latter regard, the new James M. Skinner Hall and the newly-organized Faculty Club which operates there in have offered a wealth of opportunities for social interchange within the University family.

The connotations of the unfortunate phrase "teaching load" were minimized in the report and attention was focused upon instructional opportunity and research potential. It was recognized that committee work was essential if faculty participation is to be effective, but an appropriate balance was recommended between the democratic method and the administrative authority stemming from the Trustees to the President, Provost, Deans, and department heads. Provisions for improved salaries, a better definition of tenure, and a continually expanding program of personnel benefits were all constructively dealt with.

Continuing progress is being made in improving the salary structure and in providing other benefits. Nevertheless, we are quite cognizant of the cumulative influence of inflation and taxes on purchasing power, and we recognize that the most obvious task for the future is the securing of the necessary resources to accelerate the rate of increase in remuneration during the next five years or so. A statement of procedures relating to academic leaves with pay has been adopted, the full implementation of which is dependent upon financial considerations. Another departure designed to encourage the faculty in their teaching endeavors is a series of $1,000 awards for members of the undergraduate faculties who demonstrate superior teaching ability; an initial group of 20 persons were honored in 1959.
The Trustees affirmed a recommendation of the Educational Council calling for a change in the statutory retirement age, in other than the two medical schools, from 70 to 68, with an option by the faculty to teach part time effective at age 65. This permits a desirable flexibility in retirement arrangements without adversely affecting faculty currently holding tenure, and enables a person to taper off his academic responsibilities if he so desires.

The inadequacy of faculty rewards for many generations is inevitable in the conservatism we observe. A more liberal period may be confidently anticipated as salaries rise, prestige increases, and faculty councils assume greater responsibility in our educational community. The roots of faculty conservatism are not exclusively in ancient traditions but also to some extent in the repressive circumstances which have recently characterized the national scene, in which faculty careers have not offered the material rewards and public prestige which are properly commensurate with the service rendered to society. As public recognition of the essential role played by higher education in human welfare increases, and as additional funds flow in to rectify the seriously discrepant salary level of university faculties, the somewhat protectionistic and reactionary attitudes which have quite reasonably been inherited from the past and which handicap liberality and enterprise will give way to a greater receptiveness to experiment and innovation.

A tendency to regard one's profession as in need of protective provisions and to spell out the details of prerogative with the view to holding the line against encroachment by interests apparently antithetical to those of universities cannot but be a negative and retarding influence. This point of view dissipates faculty energies which should be directed toward the essential and constructive programs which they alone can carry out and which it is so essential be conducted with the maximum of freedom to innovate and energy to refine and perfect. At Pennsylvania the conditions of congeniality to faculty enterprise must be such as to encourage all phases of academic adventure, and the full energy of our community must be directed toward a common goal which is determined and set by our own judgment, to the end that we may be leaders in adapting education to the changing needs of society. Here is the administration's paramount responsibility, and the years ahead must be ones of united effort to coordinate a diversity of talent in its application to the most promising and significant of the educational opportunities that lie ahead.

The Trustees

The study of the Trustees related closely to the study of the faculty, and greater joint activity between these two groups was recommended. The administration is seeking ways to bring this about without blurring the areas of prime concern of the respective bodies. The Trustees, bearing responsibility for the custodial and fiduciary functions, the ultimate source of legal authority, and for determining the public interest, complement the area of responsibility of the faculty, which is that of educational policy and practice and the conduct of the day-to-day academic affairs of the University community in accordance with the best judgment that can be brought to bear. The overlapping interests
of these two groups are great, and mutual esteem and regard are essen-
tial in order that they may each function effectively within their
spheres of particular competence and also co-operate effectively in the
broad area of common interest between them. To this end, informal ex-
changes of views between members of the faculty and the Trustees have
been successfully initiated.

The Survey was also most helpful in pointing to the need for the
continuing infusion of new blood in the Trustees and the importance of
the effective presentation to the Trustees by the administration of the
many facets of the University for which they are responsible. Subse-
quently the Trustees approved changes in the Statutes of the University
which create a retirement age and a rank of Trustee Emeritus, reduce
the term of newly-elected Term Trustees, and alter the composition of
the Executive Board, Trustee committees, and advisory boards. The net
effect of these changes has been the elevation of eight Trustees to
Emeritus rank and the election of a like number of new Term Trustees.

The Problem of Long-Range Planning

The study on financial and budgetary problems pointed out that a
university administration is constantly faced with problems involving
the interrelation of financial and educational policies. Decisions
which may be justified on purely educational grounds often have finan-
cial consequences which must be given full consideration before their
acceptance; decisions which may seem wise from a purely financial point
of view may affect the ability of the University to carry out its educa-
tional policies, and such effects must be considered before the decisions
are made. So long as funds are limited so that all of the objectives
of the University cannot be met in full, there is a need to choose and
strike a balance among educational and financial advantages of proposed
actions. The Survey likewise made a study of budgetary policy and
procedure; an initial step in implementation of recommendations was
taken through appointment of an assistant to the Provost in budgetary
affairs, which office will facilitate the process of budget making and
keep a more balanced estimate of budgetary demands throughout the year.

At the same time, a University Budget Committee has been function-
ing for the purpose of scanning budgetary proposals from a broad educa-
tional point of view and of testing the propriety of specific items.
This is serving to bring about the preparation and operation of budgets
on an objective basis rather than by use of the preceding year's budget
as a fiducial point of departure.

The University comprises many schools, divisions and activities,
not all of which can be self-supporting. Peripheral undertakings which
are not self-supporting require a diversion of funds from other activ-
ities; in the process, vital responsibilities of the institution may
be diluted and the University thereby weakened. If Pennsylvania is to
grow in vigorous and dynamic action, its vital functions must be thought
fully defined and supported; nothing should be allowed to interfere with
or impede these central responsibilities.
We must face the problem of what we can afford with the resources at hand and in reasonable prospect. The University cannot be all things to all men. The creation of new schools, institutes, departments, and other activities must be weighed carefully in terms of their potential contribution to the mission of the University. At the same time, consideration must be given to eliminating activities which fail to meet this criterion. The Trustees, administration, and faculty, working together, must define the important functions of the University. Even though there may be valid differences of opinion, agreement should be possible on priorities. Once the basic philosophical decision has been reached, the University should be able to set a course and maintain it.

Practical meaning was given to this approach to long-range planning through creation of a series of committees which are considering the factors of education, physical plant, and fiscal policy for the next decade or so, to the end that an integrated plan of University development may be evolved. Such a "master plan" should serve to coordinate the entire program of the University, to state clearly its objectives, and to interpret these objectives to its various publics.

It is within the context of significant opportunities presented that The Annenberg School of Communications was established in 1959 as the result of an agreement entered into with The M.L. Annenberg Foundation and The Annenberg Fund, Inc. The School conducts teaching and research programs associated with the art, science, and techniques of mass communication. The first students received the Master's degree in 1960.

Still another opportunity which has been presented to the University relates to the establishment by the Advanced Research Projects Agency (Department of Defense) of a major program in materials science, one of three such university programs in the country. It will serve to enhance scholarly activities in physics, chemistry, and metallurgy.

Attention is being given to bringing about greater efficiency in the use of the resources currently at our disposal and to planning appropriately for the next few years. Toward this end, a committee has studied and reported upon the academic calendar and given ancillary consideration in the neighboring areas of physical facilities and personnel. Approval has been given to its recommendation for a modification of the present calendar so as to permit the increased utilization of facilities and the acceleration of larger numbers of students. The new calendar for 1961-62 will make possible a relatively easy transition to a full three-term calendar in the event future circumstances require year-around operation.

As the result of a continuing study of University finances, certain increases in tuition have been instituted in recent years. This necessary procedure in the maintenance and strengthening of our educational programs does not increase appreciably that portion of the educational costs borne by the student. It is part of our tradition that no student pays
nearly the full cost of his education, and it is not likely that any ever will. Proportionate increases in student aid have been effected in order to eliminate as nearly as we can the economic factor as a deterrent to equal educational opportunity. We are firmly dedicated to the principle that, since both the individual student and society in general benefit from the cost of his higher education, both should contribute toward financing that cost. It is hoped that the relationship among these several sources of funds can be maintained, to the end that the cost of obtaining an education may be kept well within the reach of all those persons, whatever their means, who have the desire to come to Pennsylvania and the ability to benefit from the opportunities available here.

The Student Body

The Survey also gave attention to the policy which would be conducive to the bringing together of the most responsive and promising student body within the University. Specific recommendations include the following:

1. A strong and continuing emphasis on improvement in the quality of the student body; use of the prospective increase in applicants to raise academic standards in all schools.

2. Greater attention to the gifted student and creation of a rich and challenging program of honors work.

3. A carefully analyzed and clearly enunciated policy with regard to advising.

4. An investigation to illuminate the place of religion at Pennsylvania with a view to formulating specific forward-looking policies in this area.

5. A clear and inclusive statement of University policy with regard to fraternity life and organization.

The administration has been specifically charged with further study and the creation of programs and policies which will assure the attendance at the University of those persons who can most likely make the greatest use of the opportunities presented. Recent developments in the Student Affairs Division reflect an acute acceptance of the spirit of these proposals, implementation of procedures deemed responsive to them, and the addition of facilities to support them.

The opening of McClelland Hall in the men's dormitories has provided a setting for closer student-faculty relationships through formal and informal faculty discussions. Plans to erect new graduate and professional school student residences follow upon the opening of the Law School Dormitories. These plans received tangible support through a
gift from Harold C. Mayer (Class of 1915 Wharton) for construction of a
dormitory for students in the Wharton Graduate Division. The attention
being given to the development of additional residential areas for male
undergraduates gives every indication that recreational areas can be pro-
vided nearby. Construction of the new women's residence hall consti-
tutes, perhaps, the most important bench mark in this University's oppor-
tunities for the education of women. The physical facility itself is
considerably less important than the real opportunities for education out-
side the classroom that will be made possible; in addition, it will en-
able our women's student body to achieve the same national representa-
tion that has prevailed among their male counterparts.

A successful fund campaign has assured new tennis courts in the
Palestra area. The further development of the River Field playing areas
will provide more adequately for both intercollegiate and intramural ath-
etics and for physical education.

There has been continued improvement in the caliber of the entering
freshman class, and there is every determination to enhance from all
points of view still further those classes to be admitted in the years
ahead. With completion of the preliminary phase of a study of prediction
of academic success through correlation of College Board test scores and
secondary school performance during the freshman year, the Registrar's
Office was able to devise procedures to incorporate the use of predicted
averages in the admissions process on an experimental basis for candidates
applying for admission in September 1960. The experience of each incom-
ing class will contribute to the building up of a reliable set of data on the
relative value of these various factors as predictors of academic achieve-
ment. The feasibility of applying this technique to certain graduate and
professional schools will also be explored.

Applications for freshman admission in September 1960 showed a 28
per cent increase over the previous year, and applications for advanced
standing were up considerably also. The quality of those applying was
markedly improved with the result that an unusual number of candidates
who had credentials superior to candidates previously accepted were
denied admission. The freshman class will number some 150 more than the
entering Class of 1959.

While it is too early to draw any hard and fast conclusion as to the
effect of an increasing quality in our undergraduate population, never-
theless there have been encouraging evidences of a growing interest and
concern for the educational experience one finds at Pennsylvania. This
has been reflected in the columns of the student newspaper through res-
ponsible articles on student attitudes, responsibilities, and morals. I
have had freshmen call upon me to talk about their educational experience
and to express their interest in such matters as advanced standing, honor
programs, improved advising, and a lesser emphasis on grades and academic
bookkeeping. Student leadership in activities outside the classroom has
grown in maturity and insight, an example of which is the plan formulated
by the Class of 1960 for the accumulation over the next quarter century of a sizeable 25th Anniversary Gift to the University. It is anticipated that a statement of University policy on fraternity life will soon be enunciated, as the result of a report soon to be issued by an ad hoc committee of the faculty, alumni, and administration.

It appears evident that the undergraduate faculties are becoming increasingly cognizant of the importance of academic advising and the fostering of closer personal contacts between students and faculty. In the Wharton School last year, the Board of Curriculum Advisors was supplemented in the realm of personal counseling by some 60 faculty members in the professional ranks, each of whom made himself available to six or so students for friendly advice and interchange. Informal coffee hours for seniors have also proved to be stimulating and revealing as to student attitudes.

In the College, efforts have been made to improve the advising of freshmen and sophomores through the appointment of additional advisors from the more seasoned ranks of the faculty and by stressing the fact that advising is not restricted to the mere planning of a student's term schedule but that it should embrace the entire range of academic problems and plans. In addition, the Dean's Student Advisory Committee has been reconstituted as a means of bringing student opinion to bear on vital issues within the College.

Another venture is the University Counseling Service established last year for the purpose of giving students an opportunity to talk over with trained counselors their problems, whether educational, vocational, or social in character, to analyze them and consider alternatives, and to embark upon a program of action. The Service operates in cooperation with the many other sources of advising and counseling already in existence.

Financial assistance now benefits over 3300 students, to the extent of $2,780,000 in scholarships, loans, and employment opportunities; one out of every three full-time students is so benefited. The availability and usage of loan funds continues to grow, and our experience disproves the oft-heard observation that loan funds are unacceptable to students and are therefore not used; rather, the pressure for additional loan dollars continues to rise.

Continuing efforts are being made to bring religion into a closer relationship with the academic structure of the University and to overcome the viewpoint of religion as an extra-curricular activity. In recent years, a series of events was undertaken which brought to the campus distinguished scholars and theologians of the Protestant, Roman Catholic, and Jewish traditions. Under their guidance, students and faculty members explored the facts and claims of religion as these have relevance both to the scholarly endeavors of learning, teaching, and research throughout the various segments of the University and to the personal and social lives of those who are engaged in these endeavors.
IN CONCLUSION

The Educational Survey is having a vast impact upon the University: a critical study of performance is leading to major academic improvement in schools and in departments; its pervasive breadth throughout the University is bringing renewed pride in our areas of excellence and stimulating the lagging elements in our community; widespread participation is unifying the entire structure; and a spirit of both responsibility and enthusiasm is being engendered through all levels of the faculty which is refreshing to this ancient institution. The groundwork was so firmly laid and the guidelines so clearly established that the University will, through a now familiar process, perpetuate a continual re-examination of itself and readjustment of its objectives and techniques.

We have learned that tradition must forever be modified by growth, that education is not a static concept, and that the inconveniences and dislocations that result from change must be accepted as the price of that vaulting excellence which the University holds before itself as its pre-eminent objective. Future generations at the University of Pennsylvania will grow increasingly conscious of the debt which they owe to the Survey for pointing the road ahead and setting the feet of the University firmly upon its course.

In closing, I can think of no more appropriate thought than that expressed by former Provost Rhoads in his final report:

"Pennsylvania is a great university but fortunately a dissatisfied one. Its further development is bounded only by horizons and not by walls. It will be the sum or at least the resultant of the efforts of the individuals who compose it. They have in common the desire to develop a greater university here at Pennsylvania than this country has yet known. It will take intense and sustained effort, but I see nothing to prevent success — and within our time."

Gaylord P. Harnwell
President