A Report

TO THE PRESIDENT

OF MICHIGAN STATE UNIVERSITY

FROM

THE COMMITTEE

ON THE Future of the University

July 28, 1959

Dear President Hannah:

Attached is a Report to the President of Michigan State University from the Committee on the Future of the University. It represents the considered judgment of the faculty members appointed by you on March 3, 1959, regarding the role the University should achieve in the future and some of the desirable changes that will help achieve the aims of the institution.

It is assumed that with the presentation of this report the obligations of the Committee are fulfilled.

Respectfully, Dale E. Hathaway, Chairman Arthur E, Adams, Exec. Sec. Pearl J! Aldrich Richard E. Chapin John W. Cr eatrice J. John W. Crawford Beatrice F. Moore div. word Paul L. Dressel Towilas Du Douglas Dunham Charles K. Whitehair John W. Hanson John W. Hanson

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To the University Faculty:

This report by the Faculty Committee on the Future of the University is being published and given limited distribution in order that members of the faculty and others directly concerned may share with me the benefits of the thinking of the committee.

This report is the result of many weeks of arduous effort on the part of the committee members, who undertook their difficult assignment in a spirit of helpfulness and carried it out with diligence and dedication.

This is, in effect, a working paper, and should be read as such. Helpful as it will prove to be in planning for the future of Michigan State University, it is in no sense a final blueprint. The recommendations will have to be considered by many persons—the Board of Trustees, administrative officers, our faculty organization, and others. The comments and recommendations must be considered in their proper context so that our decisions will be informed and well-reasoned. Too much is at stake for snap judgments.

What emerges from this report is the picture of a strong, dynamic University with a proud history and living traditions, among the greatest of which are its ready acceptance of the fact that the world does change and its willingness to admit that improvements in its structure and methods can and should be made as a consequence. One of Michigan State's most valuable assets is its remarkable combination of the stability of age and the adaptability of youth.

All this augurs well for the University as it looks to the future when it will be called upon to perform with even greater efficiency, wisdom and courage in the service of the people of Michigan. In our planning, we will owe a continuous debt of gratitude to the members of the committee whose report will be an invaluable source of reference and inspiration.

John A. Hannah

President

Preface

At an assembly of the staff of Michigan State University on January 16, 1959, President John A. Hannah discussed the state of the University. Referring to the future of the University, he said in part:

"Believing sincerely in the capabilities of this faculty, and trusting implicitly in their interest and determination, I intend to appoint within the next few weeks a faculty committee on the future of the University. Patterned to a degree after the structure that brought the Basic College and the reorganization of 1944 into reality, I intend to appoint some of the best and ablest members of the faculty, representative of all of the several colleges and major auxiliary divisions. This all-University committee will, with the concurrence of the deans, be bulwarked by similar committees within each college on which all departments will be represented. It is my hope that the organization can be completed and the work undertaken within the next few weeks and that the members of the University-wide committee can be relieved of part or possibly, in some cases, all of their current responsibilities to enable them to devote to this assignment the time and attention it deserves.

"We will ask the parent committee and the subordinate committees to listen to anyone who has anything to say concerning the future of our University so as to garner every bright idea that develops. We will ask them to estimate as best they can the demands to be made upon Michigan State University, to recommend the best possible organizational structure — to come up, in short, with suggestions as to the size of the job before us and the best ways to get it done." On March 3, 1959, President Hannah announced the appointment of the following persons to a Committee on the Future of the University:

DALE E. HATHAWAY, Chairman, Dept. of Agricultural Economics ARTHUR E. ADAMS, Dept. of History

(Dr. Adams served as Executive Secretary of the Committee)

PEARL J. ALDRICH, Dept. of Institution Administration

RICHARD U. BYERRUM, Dept. of Chemistry

RICHARD E. CHAPIN, Librarian

JOHN W. CRAWFORD, Dept. of Advertising

PAUL L. DRESSEL, Evaluation Services

JOHN W. HANSON, Dept. of Foundations of Education

JOHN L. HAZARD, Dept. of Marketing and Transportation Administration

H. H. KIMBER*, Dept. of Humanities

EMMETT M. LAURSEN, Dept. of Civil Engineering

ERNEST O. MELBY, Distinguished Professor of Education

PAUL A. MILLER, Provost

BEATRICE F. MOORE, Counseling Center

EDWARD WEIDNER,† Dept. of Political Science

CHARLES K. WHITEHAIR, Dept. of Veterinary Pathology

A first brief meeting of the Committee was held with President Hannah on March 12, 1959. At that meeting Mr. Hannah presented the Committee with a letter containing his charge to the Committee which read as follows:

"It would be easy to say that the Committee on the Future of the University has no boundaries to the

^{*} Due to the illness of Dr. Kimber, Dr. Douglas Dunham, Department of Social Science, was asked to serve as the Basic College representative on the Committee. Dr. Dunham continued to serve on the Committee until its work was completed.

[†] Dr. Weidner replaced Dr. Walter Adams, Department of Economics, who subsequent to his appointment, was abroad on leave of absence from the University during the spring quarter.

area of its investigation, the nature of its inquiries, the direction of its conclusions. In one sense this is true, for certainly there should be no reluctance on the part of the Committee to look at any phase of the University's operation, either in being or speculated as possible for the future. But on the other hand, there are some conditions that, to at least a degree, must play a role in determining the course and pattern of your work.

"The Committee will find it impossible to free itself from the structures of time and space. It is the next 10 or 20 years with which the Committee must concern itself. The Committee will always have to bear in mind that the University which it is studying is located in a particular state, in a particular nation, in the present world. This fact, coupled with that of time, cannot help but affect the Committee's deliberations.

"Nor will the Committee be able to overlook the nature of the institution itself. Michigan State University has been the very embodiment of the land-grant philosophy which couples instruction, research, and extension in the interests of the people of Michigan. The problem is not one of testing the validity of this proposition, but rather of being concerned with how this philosophy can best be implemented in a period far different from the one to which that philosophy was originally indigenous.

"Within these broad guide lines, the Committee will undoubtedly find itself a victim of a plethora of choices as far as directions it may take, matters it may consider, ideas it may mull.

"One other matter of moment. As a first item of business, the Committee should turn its attention to the development of one or more devices which will assure widespread faculty involvement in the discussion which it undertakes. A final report, whatever its merits, which is tendered from a process limited to but a few will have a limited impact. All of our faculty people need to be confronted with the hard task of defining problems, taking account of limited resources, recognizing complexities. How this can best be done is a problem for the Committee.

"There is a temptation here to list some of the questions to which the Committee should address itself, but this I shall resist in favor of simply setting forth some generalizations which seem to me important even if obvious.

"The University is a social institution, and its role cannot be assessed without reference to the society—state, national, and world—in which it rests. This fact has meaning for its instruction, its research, its service. How to keep it respondent to those social needs is of vital importance.

"The University, whatever else it may be, is a teaching institution. The effectiveness of this teaching can in the last analysis be measured only by the extent to which student behavior, either covert or overt, is changed in a desirable direction. The University which has lost sight of its instructional mission, broadly construed and at all levels, will soon find itself less than a complete university.

"As the University has the responsibility for preserving and imparting past and present knowledge, so it has the obligation to discover new. And the delicate balance which assures that the three fields are all tended, and tended well, is as worthy of our best efforts as it is difficult of attainment.

"Finally, I repeat, 'The relationship of a public university to the rest of society is symbiotic; the public university must be free and it must be critical; at the same time it must ever be aware that the health of the society and the health of the University are being weighed in the same balance.'

"I have asked the deans and administrative officers of the University to give your Committee their complete cooperation as you request it and to relieve you in so far as possible of all other commitments and assignments for the balance of this academic year so that you will be able to make the work of this Committee your principal undertaking. It is hoped that as you proceed you will report regularly to the faculties of your various colleges, and to the University as a whole so that the entire University may become involved in your work and all of our resources be made available to you.

"When your work is completed, your report should be addressed to the President of the University. Recommendations that involve changes will eventually be presented to the appropriate agencies as prescribed by the charter of our faculty organization.

"Upon your invitation, I shall be pleased to meet with you from time to time if you feel that such conferences and discussion will be of assistance to you. Vice President Hamilton will likewise be available, and you are free to call upon other members of our staff as consultants or advisers as you see fit.

"Service on this Committee will permit you to make a major contribution to this University. I am sure it is a task to which you will bring both diligence and wisdom."

Members of the Committee regarded their membership on the Committee as a full-time obligation. In fulfilling this obligation the Committee held 67 meetings. It also held five open hearings with members of the faculty and two open hearings with students on various matters of importance to the future of the University. Individual members regularly attended their respective college committee meetings, and the University Committee met for an evening with the members of all of the college committees. The Committee also held a dinner meeting with a selected group of the alumni to discuss with them the future of the University.

Beyond these contacts of the Committee with faculty, students, and alumni, innumerable discussions were carried on across the campus by individual committee members and subcommittees. One subcommittee, for example, met with every college committee to enable its members to understand fully the problem it was examining.

In order to understand better some of the student attitudes regarding various aspects of university life, a questionnaire was prepared and distributed to about 11,000 students by the Office of Evaluation Services. Approximately 7,500 completed questionnaires were returned, providing information helpful to the committee members in their judgment about certain matters affecting student life.

The Committee received numerous letters containing suggestions from the faculty, students, and alumni, ranging in length from a paragraph to a major essay. Many contained suggestions of help to the Committee.

-It is difficult for any group to attempt to lay out firm guidelines for its future development. Part of the difficulty lies in the inability of human beings to forecast accurately the political, social, and economic events which will inevitably alter the course of the University and which will in turn be altered by it. Much of the future of the University will be determined by the faculty, students, and administrators in future years. Part of the future has already been cast by the University's history, philosophy, and the services it has rendered to society.

Conscious of its own inadequacies, the Committee on the Future of the University has attempted to consider the direction which the University should take in the years ahead. The Committee has not labored alone in its task. Faculty, students, administrators, and alumni have all given freely of their time and ideas to aid in the deliberations. Unfortunately, it is no longer possible to give credit to the sources of suggestions which are included in the Committee's recommendations. The Committee recognizes that it has the final responsibility for the recommendations and has accepted this responsibility.

Many of the analyses and suggestions will not be unanimously approved, nor would they prove useful if they were to be applied rigorously without regard to future internal and external changes. Therefore, the Committee has given consideration to the processes by which flexibility and desirable change can continue. It is hoped that the general direction spelled out in the recommendations and the mechanisms for future change will prove of significant value in the growth of the University.

The results of these varied activities are embodied in the report which follows. This, then, represents the interpretation of the Committee on the Future of the University of its charge.

SUMMARY

The progress of Michigan State University during the last ten to twenty years has been indeed gratifying. However, the Committee's assignment is to point the way to the future, to the next ten to twenty years, rather than to laud the accomplishments of the past. To continue solely along on the paths of development already established without major changes would be unwise. A number of these paths should be abandoned, others improved and widened, and new ones built.

There is much in the following pages that may at first seem self-evident. Everyone is "for" a good library. Everyone is "for" research. Everyone is "for" graduate work. Yet the report does not merely call for a reaffirmation of the obvious. Rather, it outlines new and specific objectives and calls for significant changes if the objectives set forth are to be achieved. These changes should begin with alteration in the allocation of existing resources, not merely with waiting for needed future additions to these resources.

Underlying this report are a definition of the central role the University should seek, several major goals that further define the central role, and major means of achieving the goals.

The future to which Michigan State University should aspire is that of a university which:

- Achieves international distinction by emphasizing research, graduate, and professional programs;
- 2. Develops and maintains vigorous four-year undergraduate programs and off-campus programs of ever increasing quality which gain strength from and contribute to these research, graduate, and professional programs;
- 3. Carefully selects the programs in which it will be distinguished and allocates its available resources in the fashion that will best achieve them.

This role can only be achieved if certain broad goals are sought. The University should:

- 1. Focus attention on the development of graduate and advanced professional programs and on the development of undergraduate programs which build upon them.
- 2. Emphasize the advancement of knowledge through research.
- 3. Give higher priority to the development of the fundamental areas of knowledge and to the relationship of these areas to the problems of men.
- 4. Place greater emphasis on the liberal education components of all undergraduate curricula.

The major means to these goals will in part determine how fully the goals will be achieved. The University should:

- 1. Employ greater selectivity in the programs it maintains or develops.
- 2. Provide more college and departmental autonomy and place responsibility for program improvement at those levels.
- 3. Develop further a climate conducive to scholarship and intellectual achievement.
- 4. Implement its programs through the regular academic units which ultimately nourish them.
- 5. Develop more effective methods for employing the competence of the faculty in determining the aims and programs of the University.
- 6. Equip itself to engage in a continuous process of informed long-range planning.
- 7. Bring the physical and financial resources of the University to bear in terms of the new emphases and new priorities envisaged here.

Introduction

During the next decades, Michigan State University will be faced with the challenge of how best to continue to fulfill its historic role of service to the people of the state as the land-grant institution of the State of Michigan. A number of factors contribute to the complexity of this challenge and the urgency with which it must be met: the virtual explosion in the size of the student population and the concomitant growth of regional universities and community colleges, the problems attendant to urban and suburban growth which are becoming more critical every day, and the involvement of the State of Michigan and the United States in world affairs.

To meet this challenge, Michigan State University must marshal its resources wisely and expend them effectively. This means that it must know its special mission and must plan an integrated program to fulfill that mission. In addition, it must remain flexible to be able to meet and solve new problems as they arise.

As a land-grant institution, Michigan State University should remain sensitive to the needs of the people—fully realizing that, as in the past, this does not mean merely looking to the present but to the future. As the pioneer land-grant college, Michigan State can be justly proud of its accomplishments and service to the people of the state and of the country. In the immediate past it met the challenge of the times by growing in size and in the scope of its offerings. The challenge of the future differs from that of the past principally in the intensification of the problems in the world about us. Because the regional and community colleges have assumed their rightful role, the burden of growth in size no longer

weighs as heavily upon us. Therefore, it is essential for the University to select the activities that it can do best, and to integrate its activities so that it can make a maximum contribution to the state.

In the pattern of institutions of higher education emerging in the state, the only role for Michigan State University in the years ahead consistent with its historic philosophy is that of a university with vigorous undergraduate, graduate, research, and service programs. To be most effective, these varied activities should be integrated with each lending strength to the others. To be of greatest service, they should be selectively restricted, leaving to others that which they can do as well. To be distinctive, they should be marked by a special approach to or emphasis in their subject matter.

The University should zealously maintain outstanding undergraduate programs. In the years ahead, the excellence and distinctiveness of these programs should be constantly enhanced by close contact of individual faculty members with the complementary graduate, research, and service programs through involvement of individual faculty members. The stimulation obtained by this contact would give the undergraduate programs a character not generally obtainable elsewhere. Liberal education of all students should be continued, and the liberal content of all curricula strengthened.

Michigan State University should expand and strengthen its graduate and research programs. The traditional activity of research in agriculture can almost be taken as a classic model of the service a land-grant university should render. Research in agri-

culture, while solving many of the problems of the moment, did not neglect studies in the undergirding disciplines; it looked to the future with the realization that the solution of specific problems as they arose would depend upon general knowledge gained in the past. However, this successful model cannot be followed blindly in attacking the problems of the present and the future, because these problems are often more complex and more subtle. Research is the key to the solution of the problems of the people whether the impact is direct or indirect. Of itself then, research is an activity which should be increasingly emphasized as the problems that face mankind become more critical and urgent. In a university, research is closely linked to graduate studymoreover, it can and should be closely allied to undergraduate study and service activities.

Michigan State should continue to carry the University to the people through its off-campus activities—this proud tradition of the land-grant institutions is still a vital role. At the same time, it must be recognized that today many other organizations are engaged in similar endeavors. In this activity, possibly more than any other, there is need for close examination to be sure that we are making full use of the resources of the total University, that we are sufficiently sensitive to the needs of the people, and that new media of communication are being exploited so as to insure that the programs will be of maximum efficiency.

If Michigan State University is to move with the times and continue to be a university of state-wide interests, there must be a clear set of long-term objectives to which the University is committed. The strength of the total University is the integral of the strengths of all the separate units. Therefore, strength or excellence should be sought in every activity or area of knowledge that the University elects to enter or continue. Only in this way can the University be strong as a whole. It is unrealistic and indeed impossible to attempt to attain general strength in all aspects of all areas. Therefore, there must be selectivity both as to the activities and areas of knowledge emphasized and as to the kind of strength appropriate to those activities and areas.

Selectivity is necessary if the resources of the University are to be allocated wisely to best serve the people and the state. Program planning, in turn, is necessary if the selection is to be informed. Such

planning in detail can only be accomplished by persons knowledgeable in the particular disciplines or activities. Consequently, all units of the University should articulate their program goals, which should include statements of long-term objectives, distinctiveness of approach or emphasis, planned contributions to the program of the total University, and the methods whereby they intend to achieve these goals. In developing the goals of any unit, the feasibility of complementing or supplementing the activities of other units should be given full attention.

Since the world about us, as well as the University itself, is constantly changing, the plans developed today or tomorrow cannot be considered static. One of the strengths of Michigan State University has always been its ability to meet challenge. It should always be so. To plan more effectively in the years ahead, the University should engage in institutional research, both internal and external, to know fully what resources and strengths it has and what the needs of the future are likely to be. The greatest resource the University has is its faculty and staff. This resource should be utilized for maximum effectiveness in planning and implementing the activities of the University. Partly, this is a matter of formal organizational structure to insure communication and participation; partly, it is a matter of a climate of mutual respect and understanding throughout the University.

This report is built on a belief in the land-grant traditions in which Michigan State University is the pioneer, in the confidence that those traditions will stand the test of time in the future, but with the realization that other institutions have come to accept and embody many of the concepts of the land-grant philosophy, and that the world has changed profoundly, and will continue to change, from the time the land-grant idea was first voiced. In the body of this report an attempt has been made to interpret the land-grant philosophy for the future, to state and explain the principles to be followed and methods whereby these principles may be implemented. Many of the detailed suggestions naturally deal with problems of the moment-to consider the future of the University one must examine the University of the present. More important to the future are the generalizations which must be given body and life through the involvement of the entire University. This total involvement must inevitably result in profound change.

Building Upon the Past for the Future

No major institution of society can disassociate itself from the past, least of all a university, which as a major source of accumulated knowledge has indissoluble ties with the history of all mankind. Thus the future of Michigan State University has been considered in light of its long history of distinguished educational service to Michigan, the nation, and the world. The recommendations for the future are considered, therefore, not as sharp breaks with the past but rather as an extension and sharpening of our traditional philosophies to make them fit the needs of our society during the second half of the twentieth century.

At least two purposes of a university in society appear paramount. The first of these is the accumulation, organization, and dissemination of knowledge. Second, a university must provide for and promote the discovery of new knowledge. This is almost exclusively a function of a university, for while there are increasing numbers of private and corporate research organizations, their efforts are weighted toward the specific application of knowledge to some immediate problem. Thus, the universities are the only major institutions in our society which have no mandates of immediate practicality or bounds to their investigations.

The accumulation, organization, and dissemination of knowledge for the society is a function that is carried on by all levels of our educational system. The distinguishing feature of the university is, therefore, not in purpose alone but also in the nature of the subject matter with which it deals. In order to be ap-

propriate for a university, an area of knowledge must have some element of theoretical or speculative significance. Such a definition of function minimizes the place of narrowly vocational courses. But the definition is of no help to a university in seeking answers to two important questions, namely, what branches of theoretical or speculative knowledge should a university be prepared to offer to students and to what kind of students should it offer this knowledge.

Because the area of human knowledge is so vast and has grown so large over the centuries, and because the needs for transmitting knowledge and discovering new knowledge are so diverse and widespread, some selectivity in choosing areas of knowledge for emphasis is necessary for any university that does not have completely unlimited means.

Research and teaching should be intimately associated at major universities. Fields of research concentration should also be fields of concentration in teaching and vice versa. Thus mutual advantage will accrue.

The researcher can try out his ideas and findings in the classroom or seminar, and the students can learn firsthand about the challenge of discovering new knowledge. These are unique advantages of the university.

The provision of service by a university to the people of a state or nation is partly a matter of the transmission of knowledge and partly a matter of the discovery of new knowledge. Consequently, especially at universities with strong graduate teaching and research programs, service activities should be intimately related to the areas of knowledge in which there is emphasis in teaching and research.

Interpreting the Land-Grant Philosophy

Beyond its tradition as an American university, Michigan State has the tradition of the pioneer landgrant university in the nation. This tradition, which has served our society well for more than a century, needs meaningful reinterpretation for the years ahead.

A fundamental assumption of the philosophy underlying the land-grant university is the desirability of equality of educational opportunity at the university level. In part this assumption is based upon the democratic philosophy epitomized by Abraham Lincoln. In part, it is based on the equally tenable basis that modern society needs many highly trained individuals. Originally, the land-grant college act provided for institutions of higher learning that would devote themselves to the education of the agricultural and industrial classes. Furthermore, the land-grant institution presented an opportunity to those who were not necessarily rich and wellborn to become educated and to perform a variety of useful roles in society.

While it may seem that this has become a firmly established tradition in American university education, it is highly desirable that this principle be reaffirmed at the present time. Large prospective enrollments and increasing costs of higher education create strong pressures to reverse the philosophical trend of the past century. These pressures result in suggestions that the costs of university education should be borne largely by the recipients rather than by the society at large.

Such suggestions are antithetical to the philosophy upon which Michigan State was founded and should be resisted strongly by the University. It is impossible to believe that the on-campus program could be financed largely by student fees and that the University could continue to have as an integral part of its operation, a major research and off-campus educational program financed by and for the public interest. If the self-supporting principle is successfully applied to the on-campus program, it will undoubtedly be extended to the off-campus programs and to research.

At such time the philosophy of the land-grant university will no longer have meaning. If Michigan State is to play a significant role in keeping with its philosophy, the teaching and research programs must be increasingly integrated rather than separated, but acceptance of a plan whereby the recipient pays the total cost of his education would lead to separation rather than integration of the total University effort.

A second precept of the land-grant philosophy is the desirability of providing a broad liberal education for students who are also interested in technical or professional training. This has often been overlooked by some proponents of the land-grant philosophy, but it was clearly expounded by the early leaders of the movement. Moreover, it is increasingly clear that education for "citizenship" and for a "full and satisfying life" requires far more than a good technical or professional education. A university that does not enable its graduates to understand their own culture must count itself a failure. In addition, in the world in which we now live, a university which fails to enable its graduates to grasp the significance of events in the world outside their immediate culture will also have failed in a major obligation.

If educated persons are to be effective citizens in the world, they must be prepared to make difficult moral choices as individuals and as members of social groups. A democracy cannot survive unless its members recognize their responsibilities for the ethical as well as the technical implications of the public and private decisions being made. The university is not an institution for indoctrination, but the university experience should equip the student to examine his ethical position and to analyze and define the value systems necessary to the maintenance of a free society.

A third feature of the land-grant philosophy is that the university should use its knowledge and facilities for solving the significant problems of society. When the land-grant system was founded, the major needs of society were related to the need for the development of agriculture. Shortly thereafter, the need arose for the development of the mechanic arts to support an expanding industrial society. Thus, the early land-grant institutions offered work in agriculture and engineering, expanding into other fields as the developmental needs of society changed.

Another facet of the land-grant tradition has been a willingness and a deep recognition of the university's responsibility to carry knowledge to the people. This concept has been embodied historically in the farmers' institutes and in the Cooperative Extension Service. More recently, it has been adapted for a wider audience by the Continuing Education Service and by our international programs. The experimental program of Liberal Arts for Adult Education, financed by the Ford Foundation and carried out by the College of Science and Arts, is another significant example. Methods of transportation and communication have changed rapidly in recent decades, and traditional methods must also change in the future.

A fourth precept of the land-grant philosophy is that a university ought to be a mechanism for change in society. Land-grant universities must not become so oriented to the problems of today that they do not help toward the solution of the problems of tomorrow. There must be a balance between those emphases that are popularly approved and relevant in their application today and those areas that are not readily applicable today and not necessarily popularly perceived as worthy of emphasis. Land-grant institutions are not just followers of the people. They also are creators of new ideas and thus contribute toward a new day for the people.

It is important that Michigan State University should continue to be a leader of the land-grant philosophy. It must take initiative in applying the landgrant philosophy to today's situation. It must continue to capture the spirit of drive, experimentation, and change that characterized the land-grant institutions in their early years. To do this requires recognition that society itself has changed and its developmental needs are more closely interrelated than ever before. The agricultural and industrial-urban portions of our society are no longer largely separate. Nor is our own society largely aloof from that of the rest of the world. The education to equip young men and women to meet the developmental needs of society in the years ahead must simultaneously be both more advanced to enable them to deal with more difficult problems and more general to enable them to deal with the many interrelationships in the society.

In terms of the national manpower needs and resources, it is essential that a university provide a variety of highly trained individuals. Because there is a need for more highly trained individuals than in the past, some of the initial task of land-grant universities must be shared by community colleges and regional universities, and the larger land-grant institutions should assume even more responsibility for increas-

ingly difficult and complicated tasks. This is the only course of action they can pursue if they are to maximize their contribution, as well as the contribution of other colleges and universities, to the people.

As land-grant institutions continue to modify their emphasis to include new developmental needs, there are some major adjustments which must be made. They cannot entirely serve the needs of any other group in society in the way that they have served the needs of agriculture in the past. This is in part because the other developmental areas of society such as industry or urban areas are highly complex and do not involve individual families in the way that is true in agriculture. Michigan State University must meet this challenge by devising new approaches to these new developmental areas.

National and State Developments in Higher Education

When the land-grant universities were first created, they were unique in their respective states or territories. In some cases, a land-grant university was the only public institution of higher learning in a state. Where another public institution of higher learning also existed, it tended to be an institution with a different philosophy, largely devoted to educating the "few" in such fields as theology, medicine, and law. However, in the last hundred years many public colleges and universities have been created in each of the states. Many of them were created as "people's universities," much as the original land-grant universities were. Furthermore, the older universities broadened their clientele, moving in the same direction as the land-grant institutions.

The predominant characteristics of higher education in the United States today are those that mark the land-grant universities. All public universities, whether officially land-grant universities or not, subscribe to the kind of principle that has long been associated with the land-grant philosophy. Some of the non-land-grant public universities have very large extension systems. Almost without exception they are looked upon as "people's universities" just as much as their sister land-grant institutions. Private universities also have come to have many characteristics of land-grant institutions.

The traditional philosophy of the land-grant university has been, in fact, so widely adopted by most American universities, public and private, that this philosophy no longer provides a useful criterion for differentiation from other public universities and many private universities. To say that Michigan State was the first land-grant university or that it is the best land-grant university is no longer sufficient claim to distinction.

This need not, however, be a matter for concern. If, as we believe, this philosophy of higher education is sound, it is fitting that its desirable features should be continued in the future. What should be and is of concern is the fact that our University can no longer be content to rest its case solely upon this philosophy.

Adapting the land-grant philosophy to the needs of the years ahead, we must now move forward vigorously to create for ourselves a distinctive role among the many other institutions of higher education in the state and nation. It is to this end that major recommendations of the Committee on the Future of the University are pointed.

Not only must the University review its role in light of the changes in society, but it also must reinterpret its role in view of the changing scene in higher education in Michigan. Perhaps more than any other, Michigan State has been the state-wide university in Michigan. The student body has been drawn from every county in the state. These state-wide contacts have been strengthened over the years by the existence of 79 local offices of the Cooperative Extension Service and more recently by the regional offices of the Continuing Education Service. In the past, Michigan State has had unusually close and intimate ties to local communities.

In recent years, however, new developments have changed these relationships and even more changes are probable in the future. The increasing number of state-supported, regional, four-year universities is one factor. At the same time, there has been rapid growth of community colleges, partially state-supported, which offer the initial two years of undergraduate programs.

The regional universities, too, seek to serve the interests of these communities and to carry out programs encouraging the development and progress of these communities. In some instances, the regional universities believe that certain Michigan State University state-wide programs and obligations may retard or conflict with their development of desirable programs.

Students have loyalties to their communities and regions and find certain economies in living at home. These are among the reasons that most of the community colleges and many of the regional universities have experienced a rapid increase in undergraduate enrollment in recent years. During the same period, enrollment at the two state-wide universities has increased at a less rapid rate.

There are several courses that Michigan State might take in view of these developments.

For example, it would be possible to climinate undergraduate education from our program, concentrating exclusively upon graduate programs and research. Doubts regarding this course of action are serious indeed. Efforts to sustain a major graduate and research program without a significant undergraduate program have not been successful in other universities. There is also little probability of continued long-run public support for an institution which so limits the scope of its activities.

Another alternative is to adopt programs similar to those of the community colleges and regional universities, becoming, in fact, a somewhat larger regional university. The abolition of strong research and graduate programs already in being in many parts of the University would, however, bring about attrition of its excellent faculty in a short time.

While either of these two courses might be easy (in that they would require fewer difficult decisions), we believe either would be an abandonment of the traditional philosophy of this University; therefore, in keeping with our past vitality, we have defined a more vigorous and challenging role for Michigan State University in the future.

Michigan State University in the Years Ahead

The future to which Michigan State University should aspire is that of a university which:

 Achieves international distinction by emphasizing research, graduate, and professional programs;

- 2. Develops and maintains vigorous four-year under-graduate programs and off-campus programs of ever increasing quality which gain strength from and contribute to these research, graduate, and professional programs;
- 3. Carefully selects the programs in which it will be distinguished and allocates its available resources in the fashion that will best achieve them.

Decisions as to future program development and allocation of resources should implement the achievement of this role.

Strength or excellence should be sought in every area of knowledge that Michigan State University elects to enter or continue. Only in this way can the University be strong as a whole. It should be recognized, however, that there are at least four kinds of strengths or excellence: (1) excellence in an approach to an entire subject matter, or in the nature of the approach, (2) excellence in one or more aspects of a subject matter, (3) excellence in giving support to other disciplines, or (4) excellence in complementing other disciplines. It is unrealistic and indeed impossible to expect to obtain general strength in all aspects of all areas.

This will be a role containing a great challenge and at the same time requiring difficult and perhaps sometimes painful decisions. It will mean concentrating our total University research, teaching, and off-campus efforts upon those programs in which there can be a continuum of integrated effort. It will mean not inaugurating or in some cases dropping programs which have some immediate support and interest but in which there is no promise of developing significant undergraduate, graduate, and research programs. It will also mean the constant necessity of informing the people of the state that the University can best meet their needs by concentrating upon fundamental and vital problems and areas of knowledge.

A major university with a viable research and graduate study program has many resources not available in the smaller colleges and universities. These resources, properly marshaled, can provide an undergraduate program of a quality not generally attainable elsewhere. Michigan State would do best to expand and strengthen those undergraduate programs which can build upon and lend strength to our pro-

fessional and graduate schools and research programs. Therefore, it is suggested that Michigan State withdraw from the two-year certificate programs and other special programs that can be adequately handled by other types of institutions.

Without unlimited resources, no university can emphasize all of the problems of society or excel in all areas of knowledge. Therefore, in every department of every university, constant choices must be made on the filling of a faculty position, the purchase of library materials, or the allocation of research funds. Suggestions are made in this report as to means by which choices can be consciously made in the future in a manner that will consistently contribute to the achievement of the selected goals.

Michigan State University already has a number of characteristics which differentiate it from other universities. It is a large university, one of the largest in the United States. Its student body size means that it has or can have specialized programs and physical facilities that mark it as unique. Michigan State University has a faculty that is substantial in size, diverse in specialization, a faculty which has markedly improved in quality in recent decades. The University is a graduate institution that offers the Ph. D. or professional terminal degree in numerous fields. Despite the fact that it is more than one hundred years old, Michigan State University is essentially a youthful university with a relatively young and vigorous faculty. Furthermore, over the years the University has been marked by its flexibility of program and by an administration sympathetic to change. The University is located at the seat of state government in central Michigan. It is not a part of any single huge metropolitan complex, although it is a part of the large urban web spreading across southern Michigan and throughout the Great Lakes region generally.

Over the years, Michigan State University has developed a number of programs for which it is especially well known. Among the early programs in which it achieved recognition were aspects of the agriculture and veterinary medicine programs. More recently, every college has developed certain programs that are outstanding. We have developed uniqueness in the field of international programs. Physical facilities and equipment have helped in the development of special programs in some areas; for example, the electronic computer has contributed to research in many fields of knowledge.

Several general criteria are relevant in choosing areas of future emphasis. First, emphasis should be given to those areas of significance for society as a whole and to Michigan and its region in particular.

Second, those areas should be related to the fundamental fields of knowledge (which include the social sciences, the physical and biological sciences, mathematics, the humanities and the fine arts) and should be conducive to further research and graduate study. Third, areas should be emphasized which are not being adequately emphasized elsewhere or in which we have a particular strength because of history, facilities, or unusual faculty competence.

One example in passing will suffice as to the application of such criteria. Michigan State is located in an industrial state which is the focal point of a new water transportation system with world-wide impact. It has many faculty members with extensive experience in our own overseas programs and others. These experiences, if properly built upon and integrated into our teaching, research, and off-campus programs, could provide a major service to the society by providing the leadership to achieve the unrealized potential of this state in a rapidly expanding world trade.

Thus, Michigan State University can fulfill its traditional role best in the years ahead not by trying to do everything that other institutions are doing, but by doing things of significance which other institutions are not doing or can do less well. It would be unwise to attempt to do too much and, as a result, fail to achieve the high quality essential to our status as a major university.

Lest we be misunderstood, one additional general point needs to be made. Even though a large portion of our future programs will be in applied and professional areas, the University must maintain a strong core of the fundamental disciplines in the areas of the natural sciences, social sciences, and humanities. A proper balance of the fundamental and applied areas lends vitality to both, but in some areas there are indications that the growth of faculty and other resources in the fundamental disciplines has lagged, with a consequent loss both to the fundamental discipline and to the several professional programs which depend upon it.

This, then, has been the philosophical framework which was developed by the Committee on the Future

of the University as a general guide to its deliberations and recommendations.

Six broad principles or guides form the basis of the central parts of the Committee's recommendations:

- 1. Vigorous four-year undergraduate programs which gain strength from and contribute to the advanced programs of teaching and research.
- 2. Emphasis upon upper-class, professional, and graduate work.
- 3. The necessity of selectivity among programs to insure distinctiveness and quality.
- 4. Importance of the fundamental disciplines.
- 5. Emphasis upon broad, liberal education.
- Reaffirmation of the integrity of the regular academic units — departments, divisions, colleges.

Looking ahead within this framework we see a University which continues to have a significant and vigorous undergraduate program of a high quality not generally obtainable elsewhere. At the same time we should strive to raise significantly the proportion of graduate students in the student body and the quality of graduate programs. The proportion of upperclassmen to freshmen and sophomores will also rise as transfer students are attracted to the undergraduate program.

Even though the Committee reaffirms the general proposition that the major purpose of the University should be the education of undergraduate and graduate students, it feels that these programs can only be achieved by a high-quality faculty which constantly participates in research and off-campus educational programs of significance.

In order to implement the philosophy that will maintain Michigan State in its significant role in the years ahead, the Committee presents, in the pages that follow, its suggestions for teaching, research, and off-campus programs. Changes in faculty participation in University affairs are proposed because we believe that these also will contribute to the aims of the University. There is a discussion about interpreting the University to its publics. Finally, there are discussions of the faculty and other resources needed to implement these programs.

Undergraduate Education

The ultimate measure of any university is the type of people and ideas it produces. In all societies and at all times persons skilled in their occupations have been needed. Greater skill and greater competence are needed more than ever before in our complex world of today.

But the truly great needs of our time cannot be met by people who are merely competent specialists. Now, perhaps more than in any previous era in our history, the world needs people who are broad in their vision, informed about the world around them, intelligently critical of the inadequacies they see, proud of the strengths they have inherited, and above all deeply concerned about their fellow man. The preparation of such persons is not an easy task; it demands the very best of any university.

It is to this task that Michigan State University must address itself throughout all of its undergraduate programs. Our experience for performing this task is great, but, since our society changes continually, there must be no end to improvement in our undergraduate teaching.

The Committee has attempted to view the needs of the people of the state and nation in the future and to present the broad outline of a plan for education which will meet these needs. Our purpose is not to develop persons who will passively adjust to present society but persons who will be actively concerned with adjusting society to the highest human aspirations and potentials. To achieve this goal, Michigan State University must strengthen its four-year undergraduate programs, building from and contributing to the strengths of advanced, professional, research, and graduate programs.

The University should have programs which offer a different kind of educational experience from that of-

fered by the community colleges, regional colleges and universities, and other large state-supported institutions. We can provide this by coherent, integrated, four-year programs with an instructional staff of teacher-scholars: outstanding teachers who not only are competent in the dissemination of knowledge but also have firsthand experience in gathering knowledge. Such scholars, we believe, can impart to students a quest for knowledge and a sense of the excitement of learning. The resources of an increasingly fine library, campus appearances of national and international intellectual leaders, and cultural opportunities in art, drama, and music are among the advantages which are available to our students to an unusual degree.

Admission of Undergraduates

The University has been distinguished by friendliness and by a dedication to providing the opportunity for higher education to all who have the ability and serious intent to learn. We should continue to hold open the door of educational opportunity to young people of all backgrounds who give promise of success in the fields of work in which programs are provided. On the other hand, we should expect and require high levels of application from those given this opportunity.

At the present time, there appears to be no reason to apply more rigorous admission standards in order to achieve the program goals of the University. Instead, comments both by students and by faculty suggest that programs of much higher quality can be attained by increasing achievement standards to insure that students reach their full potential.

Therefore, until such time as the campus population approaches thirty thousand students, it is recommended that admission standards not be appreciably raised. A consistent admissions policy should be adopted to facilitate early and expeditious admission of well-qualified students. Stronger efforts should be maintained for finding and retaining the most capable students.

There are a number of procedures for attracting more students of high academic potential. Although we have a good scholarship program at the undergraduate level, we should increase the number of scholarships whenever possible. It is also necessary that prospective students perceive the University as a friendly place in which students may have close contact with senior faculty members, where individuals of college age are considered socially mature, and where a fine education may be obtained in an exciting intellectual environment.

Implications of Community College Development

It is to be assumed that as a result in part of community-junior college growth there will occur an increase in the number of transfers from these colleges to the University at the sophomore and junior levels and that in consequence the past curve of distribution of students by classes will be altered in the direction of heavier enrollments in the upper classes.

Nothing in this situation or in the prospective development of the community-junior college movement would suggest, however, that the University should do other than maintain the strongest possible four-year program by all units. Many students will continue to seek the advantages of attendance at a residence college of high quality with emphasis on advanced work. Also, a total four-year program is essential to insure the educational vitality of the program for the transfer student.

An examination of the statistics of communityjunior college transfers over the past decade indicates that the University will have to take positive steps to encourage transfer enrollments in the years ahead.

The University should encourage cooperative relationships with community-junior college adminis-

trators and faculty members in order that an accurate image of the University in its academic aspects may be presented at all times to community-junior faculties and students and that mutual and uniform understanding may exist between University and community-junior college personnel.

A liberal policy of evaluation of community-junior college transfer credits in terms of Michigan State equivalencies should be followed, and policies and practices as to exemptions and waiver of requirements should be equally applicable to transfer students and to all other students.

Transfer procedures should ensure adequate attention by appropriate Michigan State faculty to recommendations of community-junior college deans.

All students, including transfer students, should be placed on an equal footing with respect to the earning of academic honors.

Professional relationships between members of the faculty of this University and members of junior college faculties should be increased. The responsibilities of the Office of Community-Junior College Cooperation and those of the co-ordinators and assistant deans for Continuing Education in the several colleges should be broadened to include the promotion of such relationships.

Junior College Teaching Fellowships should be established so that members of junior college faculties may be enabled to spend a period in residence at the University and teach in University programs.

Training programs for community and junior college teachers should be developed in appropriate subject-matter areas with suitable curricula and degrees. Such programs should be vigorously promoted to the end that (1) an adequate supply of appropriately trained personnel for junior college faculties be made available and the standards of instruction thereby maintained, and (2) that there may be an appropriate proportion of personnel with degrees from Michigan State University on the faculty of the community and junior colleges of the state.

Careful attention should be given to cooperation with community colleges in planning adult education programs which fall in respective community college areas and to conduct such programs as non-credit courses, conferences, and community workshops in connection with the community colleges.

The Undergraduate Programs

Any undergraduate program should be designed to help the student acquire a considered set of personal and ethical values, an acquaintance with the world of ideas, and a sound preparation for his life's work. In re-evaluating established curricula or in selecting new programs, the University should consider whether the programs sufficiently emphasize the liberal components of education and the theoretical aspects of the particular subject matter. Any undergraduate program should have, in addition to the general education requirements in the Basic College, a number of electives, which provide a broadening of the student's outlook.

No implanned or ill-conceived accumulation of elective credits will achieve the purposes of this liberal arts education, but a carefully thought-out program of courses can do much to enrich the life of the student. Any departmental program which does not involve a strong series of liberal arts elective courses should be subjected to rigorous scrutiny in allocating resources.*

All undergraduate curricula should strive for the introduction of faculty, library resources, discoveries and techniques from the research program. New undergraduate programs should have a sufficient basis in theory and research to give promise of fruitful expansion into graduate work.

All undergraduate curricula should provide a coherent, continuous educational experience specifically designed to equip an individual to cope with subsequent changes in the fields of knowledge. No curricu-

While we share the Committee's concern for liberalizing and broadening the students' educational experience, we have great reservations about the means of accomplishment and the enforcement chosen here. Increased liberal arts electives and threatened budgetary restraints are, at best, dubious means of accomplishing otherwise worth-while objectives. The aspirations, interests and capabilities of our students are individual and different, and so are the programs of the instructional units in which they choose to enroll. The various instructional units may find alternative answers to this problem (i.e., broadening and deepening the base of existing courses, requiring more science, requiring a specified set of liberal arts courses, etc.) that make far more sense than would a smattering of liberal arts electives. Furthermore, the allocation of resources should be in response to total program and not the liberal arts component. The most superficial of the vocational programs have plenty of room to incorporate liberal arts electives while the highest level and most rigorous of the professional fields may be hard pressed. The liberal arts component is certainly no means of distinguishing programs for budgetary purposes.

lum resting on specific technique or narrow skills, or geared to mere assimilation of present knowledge, can ever achieve this.

To aid in the formulation of uniform policies designed to achieve the desired undergraduate programs, an *Educational Policies Committee* should be established to advise the Provost. Among other things this committee should give attention to the development and maintenance of strong programs in:

- 1. The fundamental disciplines.
- 2. Professional and occupational fields of significance to society.
- 3. Liberal arts education, both as separate programs and as components of professional programs.

Education in the Fundamental Disciplines

A continuing feature of the University should be its emphasis upon the fundamental disciplines and their applications to the many problems that the University prepares to solve in its diverse functions. The fundamental disciplines provide order and unity around which the interests of the faculty and students in the various colleges may be organized.

The value of knowledge in the fundamental disciplines (which generally are defined to include the social sciences, the physical and biological sciences, mathematics, the humanities and the fine arts) is selfevident. Increasingly, it is recognized that advances in applied fields also are dependent upon advances in the fundamental disciplines. In agriculture, for instance, subject-matter advances in applied fields are clearly related to advances in the physical and biological sciences. Thus, advances in these fundamental fields are crucial to the economic, scientific and cultural strength of the state and nation. Therefore, to fulfill our obligations we must strengthen our research and teaching in the fundamental disciplines and in their applications to the various educational programs offered by the University.

Education in the Professional Areas

The University must be concerned with its responsibility to prepare students for specific kinds of lifework. During the past decade, Michigan State has greatly increased its offerings in the professional, occupational, and vocational fields.

^{*} DISSENTING OPINIONS: MESSRS, HAZARD AND LAURSEN.

As business, agriculture, government, and education have become more complex, individual positions in these pursuits have tended to become more specialized. However, many college graduates find that they are often asked to assume positions outside the area of their specialized training. This is particularly true as they move to positions of greater leadership and responsibility. Such individuals increasingly have found that the training they received in the basic theories and principles of their fields are more useful to them in later life than were some of the specialized courses which appeared most useful at the time.

This suggests that to be most valuable over time in a society which is changing rapidly, professional curricula should be built upon principles broad enough to serve as the basis for judgment in a wide area of responsibilities. Close relationships between these curricula and the fundamental disciplines which undergird them are essential. Undergraduate programs in the professional fields should be reviewed with these criteria in mind, and those programs not built upon a significant body of principle and theory should be revised or curtailed.

Finally, it should be pointed out that many professional and vocational curricula provide students with internship programs beyond the campus. Such programs, properly integrated with underlying theory, can be an invaluable part of professional curricula. At the same time it should be recognized that their character may frequently suggest that traditional concepts of grading may not be appropriate, and colleges administering such programs should be free to work out more adequate bases of determining and recording accomplishment.

General Education and the Basic College*

Faith in general education — a belief in the principle of an educational experience which should properly be provided by a university for all its students regardless of their eventual occupational destination —

is a tenet of this Committee. This faith is consistent both with the land-grant philosophy and with the role of this University in developing vigorous, four-year undergraduate programs.

Achieving the proper articulation or integration of general education and professional or vocational education is necessarily a continuing problem in a changing university. One of the unique features of the undergraduate experience at Michigan State in the past has been the general education program. The Committee believes that this program should be continued, and also, that students should be encouraged to extend their general education beyond the Basic College requirements by electing work in the liberal arts.

In the various four-year undergraduate programs, the purpose of general or liberal arts education should be to help individuals achieve their full stature as free human beings and as participating citizens in society, rather than the partial stature they might achieve through exclusive devotion to a specialty or to a professional area. Students must become, within the limits of their ability, conversant with the type of knowledge which man has brought to bear upon his common and special problems. Although the total University is in part dedicated to this purpose, general education courses have a unique role to play in focusing on these major types of knowledge.

General education can make a significant contribution by helping students develop a common background of intellectual interests and a common fund of significant ideas. These are important foundations for building an intellectual community encompassing students of diverse backgrounds and professional interests.

In addition, general education helps students examine and sharpen personal ideas and values and discover new personal interests. General education is a process of opening doors to individuals, doors which might otherwise remain closed. The true education of man is both liberal and practical, and general education will play its role as it helps each student or ganize knowledge and values in such a way as to contribute to the good life and the good society.

Michigan State has developed a general education program which has contributed markedly to the achievement of these objectives. It is not surprising, however, that in the light of our changing emphases within the University and our changing vision of the complexity of the world in which we live, changes in

^{*} Dissenting Opinion: Mr. Laursfn.

Although it is understandable why the present pattern of a very few general education courses developed in the Basic College, it appears to me that there may be a fallacy in assuming that the backgrounds, interests, and level of ability of the thousands of entering freshmen is such that these few courses accomplish the aim of general education most effectively.

the nature and extent of general education are called for. Four such changes are desirable.

First, the general education experience should be an integral part of the entire undergraduate program. The emphasis of the University on building strong four-year undergraduate programs, exemplified by continuity and consistency, suggests that any division which relegates general education experiences to the first two years of the University program is unfortunate since an increasing number of our students may spend their first years elsewhere. Rather, general education should be viewed by the University, and by the student, as an essential dimension of the entire undergraduate program.

Second, all University curricula should require courses which would supplement the general education courses offered in the Basic College. Such courses should be available from any of several departments now providing such studies. It is especially important that each student should be required to take a course dealing with a non-Western culture and that courses dealing with non-Western cultures be provided by these departments. In a world in which we must understand cultures with vastly different presuppositions, or which attempt to achieve human aspiratious by institutional forms vastly different from our own, our students must come to grasp the extent and nature of these differences if they are to be truly effective citizens in a nation which has assumed world leadership. But such a study can do more than equip one for effective interaction with other societies. It can provide genuine insight into our own. Indispensable as the study of the Western heritage is, full understanding of one's own culture can come best when one grasps not only the roots of our own experience but the contrasting patterns others have developed as well.

Each college should require a minimum of three credit hours in a course in a non-European culture. Such a requirement might be met by an appropriate course in history, political science, sociology and anthropology, foreign studies, or foreign literature. It is urgent that these departments carefully analyze their offerings to determine which courses are or might be appropriate in providing this kind of introduction to a foreign culture, and to make such courses available without prohibitive prerequisites.

Third, each student's program should include a oneterm general education course in the senior year. This course should be offered by the department, division, or college of the student's major interest. It should be designed as a "senior seminar," in which the student, in his final year at the University, relates his own discipline or profession to the world of knowledge and to the great ideas and major issues of our time. Part of this course should be a "senior thesis," in which the student examines one of these ideas or issues in terms of the significant contribution made to it by the discipline in which his major interest lies. In order to assist the student to review his own field of study and to note its own distinctive nature in relation to problems of our society, the "senior seminar" should be developed and led by faculty members in the several departments, divisions, and colleges offering the course, although it is entirely appropriate for them to call upon other faculty and staff members in disciplines and colleges throughout the University in examining pertinent issues and ideas. It should be strongly emphasized that "senior seminar" is far more than a course in current events and that its great value comes from enabling the student to relate the substance and content of his major field to the society in which he will live and work.

Fourth, all University curricula should be characterized by greater flexibility. Although the general education courses of the Basic College deal with approaches to knowledge which are desirable for all students, greater flexibility in Basic College requirements is necessary.

The assurance that a concentration of work required by the student's major department will provide the comprehension of one of these approaches should be reason for exempting the student from the Basic College courses constituting this approach, but without credit.

Satisfactory comprehension which a student already possesses in one or more of the basic approaches to knowledge, aside from the approach most closely allied with his major, should be reason for exempting the student from the Basic College courses offering this (or these) approach, by examination and for credit.

Flexibility further implies that all undergraduate programs should be characterized by an increased emphasis upon liberal arts electives. Departments in fundamental and professional areas should give increased attention to developing such electives for non-majors. Such courses should be appropriately identified in the University catalog.

Candidates for public school teaching certificates should ordinarily be expected to complete the Basic College courses closely related to their teaching fields.

Content of General Education

Although the content of general education may be selected on the basis of various principles or categorized in different fashions, the present organization of content into natural science, social science, humanities, and communication skills is conducive to the development of the aims of general education.

The central purpose of the natural science course helps students understand the approaches of the natural sciences to knowledge and the interrelation and integration of the several natural science disciplines. The central purpose of the social science basic course helps students understand the approaches of the social sciences to knowledge and the interrelation of the several social science disciplines. The central purpose of the humanities course helps students understand the humanities approach to knowledge and develops an appreciation of the continuity of man's cultural development. All these courses help students understand and become committed to the use of these forms of knowledge in building the good life and the good society. Recognizing the similarities, differences, and importance of integrating these ways of knowing to develop a significant life and a strong society should be outcomes of the total experience.

The central purpose of the communication skills course is the development of effective powers of communication for participation in the University community and in the wider society. Immediate and specific attention should be given to improving skills in reading and writing.

The development of courses proceeds best when those responsible for administering and teaching courses are likewise charged with developing courses consistent with established purposes. At the same time, it is recognized that general education courses can be developed best when those charged with their development and improvement receive suggestions from and call upon and use the wisdom available throughout the University community.

If general education is to be fully effective, it can never be complete in a prescribed number of liberal or general courses. Consequently general education courses required of all students in the Basic College should be viewed as only the beginning of general education, and the effectiveness of such general education courses should always be judged in part in terms of the number of new interests they arouse — new interests which impel students into further study in the various fields of the sciences and arts.

All curricula in the University should be designed to include courses in liberal education in addition to the Basic College general education program. Departmental offerings intended for liberal or general education should be appropriately designated in the University catalog.

Distribution of Content

General education courses should be more widely distributed throughout the student's undergraduate program.

This recommendation is in keeping with the principle of developing strong, four-year undergraduate programs in which general education plays a significant role. It is in keeping with a belief that general education is not something which comes to an end as professional or special education begins; it is rather a dimension throughout education, and much of its efficacy will be determined by its being seen in relationship to special and professional education.

The following pattern of general education courses is recommended:

Freshman Year: Natural Science and Communicacation skills.

Sophomore Year: Social Science.

Junior Year: Humanities.

Senior Year: Seminar or course offered within the major department, division, or college relating this discipline to the broad problems and great issues of society.

Under no circumstances should a student's work be scheduled so that he is taking three Basic College courses at any one time.

Additional course work in non-European cultures should be scheduled in the junior or senior years.

All departments should re-examine prerequisites which demand sophomore standing for introductory courses, in order to permit students to make contact with their chosen disciplines as early as possible.

Organization for General Education

General education will make its maximum contribution to University programs when administered by someone who believes in it, is devoting wholehearted attention to making it a living part of the University, and is in a position to reward contribution to it.

The present organization of the Basic College serves the function of providing leadership in the development of vigorous general education programs developed and taught by devoted teachers. Strengthened and supplemented by advisory committees which can bring the wisdom of other departments to bear on developing strong courses, this organization is suited to the task it performs. At the same time, the present instructional organization should provide a sense of unity and purpose to the total venture and should be continued.

There is a need in the University for renewed and continued attention to provisions for a liberal education. Specialization and compartmentalization have so segmented knowledge that many departmental majors, even in Science and Arts, demand a concentration of studies not appropriate to some capable students. To provide the greater flexibility in program planning which appears desirable, renewed attention should be given to the divisional majors, to designing both intercollege and intracollege curricula to achieve definite and considered purposes which are not currently met by departmental majors, and to encouraging liberal interpretation of departmental requirements in the College of Science and Arts and in other colleges within the University. Although appropriate faculty of the Basic College may be useful in developing and facilitating such changes, especially in the divisional majors, any attempt to alter the Basic College itself into a degree-granting institution would be likely to have a deleterious effect upon the attention currently devoted to developing a distinctive general education program as a dimension of all University programs and would run into the additional problem of potential duplication of existing curricula.

The name, Basic College, is perhaps no longer appropriate in the light of this college's function of providing a unique educational experience which should not be interpreted as introductory, and of the belief that general education should constitute a dimension of the entire undergraduate program. A name more appropriate to its function should replace the name

Basic College. Among possible names suggested for discussion are University College, College of General Studies, and General College.

Faculty for General Education

The problem of teaching undergraduate students in general education courses should in no way be viewed as an unimportant or easy task, and the problem of providing excellent instruction in Basic College courses should continue to have high priority. A high level of instruction in general education courses and optimal relationships between Basic College faculty and faculty in other colleges must be assured.

Major instructional responsibility in general education courses should continue to be centered in a qualified group of regular faculty members who assume major responsibility for the continual development of such courses and for instruction in such courses. The same level of excellence will be expected in the selection of this faculty as in the selection of faculty elsewhere in the University, although the particular types of qualifications needed will obviously vary from situation to situation.

Departments in closely related disciplines should be consulted whenever possible in locating or selecting faculty for the general education courses. Ultimate decision must, of course, rest with the Basic College in terms of the particular requirements of the position to be filled. Similarly, where new upper-school faculty might appropriately wish to devote some of their time to instruction in general education courses, consultation with the related Basic College department is desirable.

Interchange of qualified faculty on a loan basis between Basic College departments and other departments is to be encouraged.

When vacancies develop in Basic College departments or in other departments, qualified faculty members in appropriate departments of the University should be considered.

Regular faculty in Basic College departments should be provided the same opportunities for scholarly investigation and research as exist for all faculty members. To this end, research assistants and time should be made available to qualified Basic College faculty members engaged in research on the same basis as in other units of the University. Appropriate faculty members of Basic College departments should be members of the Interdisciplinary Committees of the upper schools.

Where appropriate, use of Teaching Fellows in the instructional program of the Basic College should be encouraged. These Teaching Fellows should be advanced doctoral students who have completed their preliminary examinations and who anticipate possible future teaching in a general education area. Such experience will be of greatest value when viewed as a planned part of the Fellow's professional preparation for college teaching.

When appropriate, qualified Basic College faculty should be eligible to direct dissertations of Teaching Fellows engaged in this program. Such direction of dissertations should occur under doctoral programs as offered within upper-school departments and divisions. Basic College faculty selected to participate in these programs should be identified with an appropriate upper-school department or division. In addition and where appropriate, such identified faculty members should be eligible to direct dissertations or serve on guidance committees of graduate students not involved in the Basic College Teaching Fellow program.

A program of Basic College Teaching Fellowships should be vigorously developed, promoted, and supported to bring to the campus able graduate students, interested in possible future instruction in general education programs at the college and university levels.

Identification by the Student With the University and Its Colleges

When a freshman or transfer student enters the University, he should be made to feel that he is part of the academic community as soon as possible and as effectively as possible.

He should be able, as early as possible, to identify himself with a college in pursuing the goals which he perceives to be desirable.

Upon admission to the University, he should be enrolled in the college of his choice. Wherever possible, he should be assigned to the same academic

adviser for the four years of his college career. Many freshmen and sophomores, however, will not have made a firm choice concerning the area in which they wish to major and will frequently change curricula. Such "non-preference" students should be enrolled in the Basic College until such time as a preference is expressed.*

Assignment of underclassmen to colleges should be made with reasonable uniformity with regard to problems of admission, withdrawal, and readmission, reasonable flexibility for carefully considered transfers between University programs, the right of colleges to exercise selectivity at the point students achieve upperclass status, a reasonable system of student accounting, and a sense of identification with an academic adviser and a college.

The Office of the Provost should be charged with maintaining uniform, reasonable standards of withdrawal, transfer, and readmission to the University. Colleges shall be expected to carry out these standards, through their assistant deans. The Assistant Dean of the Basic College, charged with the responsibility for the "non-preference" students enrolled in the Basic College, should have additional responsibility for those students who change preference from one college to another during their first two years and for those who become "non-preference" during this period as their educational goals change.

Prior to transfer out of any curriculum, a student should consult with his academic adviser, the assistant dean of his college, the Counseling Center, and (if a freshman or sophomore) with the Assistant Dean of the Basic College, as well as with such other persons as may be of help to him in reaching a sound academic decision.

Because of the highly tentative nature of initial preference choices of students as shown by the fact that fewer than 25 percent of the entering students remain and graduate in their initial choices, we are convinced that the possibilities of "no preference" enrollment and of preference change are vital aspects of the first two years of college. Since these possibilities require much uniformity in enrollment procedures and in scholarship actions, coordination of these functions is a necessity. Since, in turn, the flexibility in change is intimately tied to the Basic College which is already charged with an all-University service function in the coordination of the core requirement in general education, we believe it desirable to maintain the present practice of vesting in the Basic College the responsibility for maintaining uniform procedures in enrollment, in preference changes, and in scholarship actions during the first two years.

^{*} Dissenting Opinions: Messrs. Dressel, Dunham. Melby, and Mrs. Moore.

Special requirements for achieving upper-class status in any college or curriculum should be made explicit in the catalog statement concerning admission to and progress in that college or curriculum.

Academic Advising

Academic and intellectual experiences are the core of a university education. An important part of this education is the opportunity for the student to have a meaningful intellectual and educational relationship with faculty members outside as well as inside the classroom.

It is unfortunate that in a University of this size such opportunities, for many students, are extremely limited. For too often, we hear students talk about the impersonal nature of the University. What they mean is that no faculty member is taking a personal interest in them. They often do not know any faculty members well enough to ask them for placement recommendations. They feel that they cannot consult any faculty member on academic or personal problems.

To provide a new approach and attempt a new solution to this problem, a complete restatement of the University's system of academic advising is in order. We should force ourselves to break away from the old concept of "enrollment officers" whose sole function was to assign students to courses and class sections. We should move to adopt the new concept of the "academic adviser", as initiated in the Ad Hoc Committee Report on Registration and Enrollment of 1957 and as progressively furthered to date by the committee of assistant deans.

This new concept sees the relation between the academic adviser and the student as potentially one of the most significant experiences in the student's University career.

Functions of the Adviser

An effective adviser serves as a means of integrating and focusing the total resources of the University upon the total educational development of the individual student. The adviser, genuinely interested in the student as an individual, is thoroughly familiar not only with his own professional field but also with the broad educational objectives of the University and with all of the resources available to the

student. Through this individual relationship, he assists the highly motivated student and seeks to stimulate the less motivated student to derive maximum benefit from his educational experiences. In the process, he often has occasion through consultation or referral of the student to enlist the assistance of colleagues in instructional departments, in research, in special services, and in other programs.

Specific functions of the academic adviser are the following:

- To contribute to the student's understanding
 of a university education and of Michigan State
 University's program and objectives in particular. The establishment of an effective relationship between the adviser and the new
 student is the key to the student's orientation
 to the University.
- 2. To assist the student with his educational planning, helping him understand the relationship between particular courses and programs and the broader purposes of education as well as vocational or preprofessional preparation.
- 3. To promote the student's assumption of increasing responsibility for planning his educational experiences.
- 4. To assist the student to evaluate his academic progress and its relationship to his goals.
- 5. To make appropriate referrals, when indicated, to instructors, Honors College, Evaluation Services for waiving exams, Improvement Services, Health Center, Counseling Center, etc.
- 6. To encourage the student whose goals seem inappropriate in terms of his interests, abilities, or other factors to re-examine his goals, to investigate other areas, and perhaps to change his objective. During this process, the adviser will frequently refer the student to special services, such as the Counseling Center, for further assistance.
- 7. To assist the student, when it becomes appropriate, to consider possible areas of emphasis within his field, to secure information about opportunities in his field, to consider characteristics needed in the field.
- 8. To stimulate the student to make *wise* use of opportunities ontside the classroom for intellectual, cultural, personal, and social develop-

ment. This repressitates familiarity with the cultural resources of the campus, types of student activities and their purposes, or, at least, knowledge of where to direct students for such information.

- 9. To contribute to decisions being made about the student through his personal knowledge and understanding of the student. For example, the recommendation of the adviser is appropriate in awarding scholarships, in selections for honoraries, in permission to carry excess loads or below normal credit loads, in decisions on academic probation or dismissal, and in major disciplinary actions.
- 10. To be alert to the personal concerns of students. Ideally, the academic adviser is a mature understanding person who takes an interest in students and is willing to listen to them. The effective faculty adviser distinguishes the problems or concerns with which he has the time and competence to deal from those for which referral is indicated. The faculty adviser is in an excellent position to inform the student and, through effective referral procedures, to help him to make use of special services.

Essentials for an Effective Faculty Advising Program

To carry out his functions, the faculty adviser should be interested and effective in his individual relationships with students. He should know his role as defined by institutional policy.

He should be willing to prepare himself for this assignment and continue to learn through meetings with other advisers and staff from special services, consultation with others, use of materials and manuals provided. This preparation includes familiarity with:

- 1. The educational goals of the University.
- 2. The appropriate use of information about the student, *e.g.*, significance of high school rank, predictiveness of test data and their limitations, etc.
- 3. Approaches to interviewing which help the student learn to make decisions and deal with day-to-day problems and concerns.
- 4. The relationship of motivational, social, and emotional factors or conflicts to educational goals

and progress, the resources available to students who need special assistance (Improvement Services, Scholarships and Loans, Counseling Center, Men's and Women's Division of Student Affairs, etc.) and effective methods of referring students when referral is indicated.

- 5. Special programs for women students.
- 6. Special problems of transfers, foreign students, etc.

He should be provided with necessary materials such as manuals and curriculum planning guides.

He should be available to students during the term at stated times (frequency probably depends on whether student is a beginning student or more experienced) and by appointment.

He should have sufficient time to see students, to communicate and consult with others, and to become familiar at firsthand with campus resources. He should have clerical help to minimize the clerical aspects of his job and adequate facilities for privacy in conversations with students.

Advisers should be members of the teaching faculty, selected by the deans of the colleges upon recommendation of department heads. Criteria for selection should be an expressed interest in performing this function, personal characteristics appropriate to working with students in this relationship, and willingness to prepare to serve in this capacity effectively.

Students should be assigned to advisers by the deans of the colleges on the following basis:

A student who indicates a departmental or area preference should be assigned an adviser in the department or area who will continue with him throughout his undergraduate program. This assignment of advisers for these students may be delegated by the dean to the department or area head.

A student who indicates a preference for a general program in a college should be assigned to a "general adviser" in that college. (For example, the Colleges of Agriculture, Business and Public Service, and Home Economics offer "general" majors. In addition, the College of Home Economics assigns all freshmen and sophomores to "general advisers" because of the number of changes in departmental preference by students during their first two years.) If and when a student changes from a "general major" to a departmental or area major, he should be reassigned to an appropriate adviser.

A student who indicates "no preference" should be assigned by the Dean of Basic College to an adviser in the Basic College instructional departments until the student declares a preference. At this time, he would be assigned an adviser in the college and department elected.

Key factors in the advisory function are opportunities for a meaningful, personal, educational, and intellectual relationship between adviser and student, long-range educational planning on an individual basis for every student, and development of increasing responsibility on the part of the student for planning his educational experiences.

To introduce the new student to the adviser-student relationship, time should be provided in the Schedule of Orientation Activities so that advisers may have group meetings as well as individual interviews with new students. Some advisers, upon their own initiative or in accord with the policy of a particular college, may arrange a series of group meetings or seminars with their advisees for continuing orientation.

After the initial orientation, individual interviews and conferences of some length during the term are essential, rather than brief contacts during the registration period.

The number of interviews should be determined by the nature of the curriculum and by the class level of the student (for example, first-term freshmen and transfer students may need more frequent contacts). Additional interviews may be arranged on the initiative of either the adviser or the student.

As soon as the student designates his area of concentration, long-range program planning rather than term-by-term planning should be emphasized. Thereafter, programs should be reviewed on a quarterly basis (pre-enrollment) and modified when appropriate, but course selection need not be the major focus of interviews between adviser and student.

The importance of academic advising should be valued and recognized not only by top administration, but also by the dean, the department head, and the adviser's colleagues.

Careful studies should be made to determine the proportion of a faculty member's time which should be alloted to academic advising and related activities. Even then, only estimates can be made in advance since the amount of time will vary with the individual student.

Because of the broad functions of the academic adviser and the importance of establishing a personal relationship between adviser and student, it is not possible for one person to serve as adviser to several hundred students in a division of a college. In most instances, twenty to thirty students to an adviser appears to be a desirable ratio. To achieve this ratio at present, in some colleges every staff member must serve as an adviser, regardless of personality, interest, capabilities, and other demands on his time. Colleges, divisions, and departments should carefully determine and designate those faculty members who will act as advisers, with regard for the optimum adviser-student ratio within the academic unit, the available office space for privacy in interviewing, and the clerical assistance to each adviser for carrying out the mechanical procedures of his function.

The advising program should be coordinated through the Office of the Provost. The Provost and the deans of the various colleges have the ultimate responsibility. An assistant to the Provost, professionally trained in counseling, should be designated to serve as Director of Acadamic Advising, working closely with the assistant deans responsible in each college for academic advising (or with such persons in each college who may be assigned this responsibility). To maintain close liaison with the Counseling Center, the director should also have an appointment in the Counseling Center.

Advisers should be provided with a manual for University academic advisers written by a qualified person after consultation with deans, assistant deans, Counseling Center personnel, personnel in other special services such as Improvement Services, Health Center, Basic College, Registrar, etc.

In addition to the University manual, advisers should be provided with other materials, such as curriculum planning guides for themselves and their students, special information about their own department and college, etc.

Advisers should be provided with such personal data about their students as will increase their understanding of the students.

A training program of one or more sessions per year and other means of assisting advisers to increase their effectiveness should be developed by the director. The staff of the Counseling Center should serve as consultants and participants on such topics as uses and limitations of orientation tests and the high school

records, identification of students with special problems, interviewing procedures, and effective methods of referral.

The Counseling Center of the University should serve as a major referral resource to academic advisers. Advisers may refer students who require more individual attention than the adviser has the time to provide or students whose problems require the specialized assistance of the professional counselor. Advisers and Counseling Center staff members are urged to maintain close liaison. With the confidential relationship of counselor and student preserved, counselors should keep academic advisers and academic deans informed as to student progress. In turn, the academic adviser could become a valuable consultant to the Counseling Center counselor. Close working relationships between academic advisers, administrative offices, and special services should make possible early identification of student problems and reduce the number of academic casualties.

Senior Faculty and the Teaching of Freshmen and Sophomores

As one means of implementing the undergraduate program visualized for the future, more of the distinguished faculty members should be brought into the teaching of freshmen and sophomores. This step will mean that distinguished faculty members will be brought into contact with larger numbers of students, and the quality of instruction will be maintained and improved. In addition, the problem of finding competent senior staff in the teacher shortage of the years ahead will be eased; the teaching productivity of the faculty will be increased; economies in instructional costs without sacrifice of quality of instruction can be achieved; increased use of graduate teaching fellows and graduate assistants will help to build the graduate enrollment; and the increase in teaching productivity and economies in instruction costs will permit additional financial support and increased faculty time for the research program.

Administrators and faculty throughout the University should give consideration to the use of large lecture sections headed by distinguished faculty members, combined with smaller discussion sections (in place of current multiple section courses at all levels);

to modifications of the equivalent contact hour and credit hour ratio in non-laboratory courses; and to such other changes in current practices of scheduling both single and multiple section courses as will increase the responsibility of the student for gaining knowledge and increase the number of students that a single faculty member may instruct effectively. It is recognized that the devices noted above (as well as others that may be developed) should be employed only where the subject matter of a course is reasonably susceptible to such treatment. Adequate assistance from graduate students will be required. In general, however, the present almost universal pattern of sectioning of lecture courses should be modified, in such ways and where such modification appears to be appropriate to the administrators and faculty immediately concerned. (For data by departments, sce Annexes 1 and II.)

Addition to or replacement of teaching staff of a department should not be approved until it has made appropriate progress in this regard.

Existing space is available for a considerable expansion of large lecture sections immediately. Use of it will help hold future capital costs to a minimum. Future building plans should include additional large lecture auditoria. (For space data, see Annexes HI-VL)

The use of large lecture sections makes imperative the greater use of graduate teaching assistants to help senior staff handle the many time-consuming details of large lecture sections. However, for the purpose of instruction in discussion sections, only regular faculty or graduate teaching fellows should be employed. Graduate teaching fellows should be advanced graduate students, who look forward to college teaching as a career, and who are preferably beyond the preliminary examinations for their doctorates. They should receive a significantly higher rate of pay than graduate assistants.

Additional Undergraduate Programs

Additional undergraduate curricula should be instituted as the need develops to provide a breadth of contact with the major disciplines accompanied by some exploration in depth in a particular discipline. The increasing number of disciplines and the proliferation of courses in each has tended to make breadth

difficult to achieve and thereby to place even greater emphasis on specialized areas. The Honors College is an attempt to make possible a liberal educational experience for outstanding students. However, similar flexibility is not always possible for other capable and purposeful students. The divisional majors offered in the College of Science and Arts provide a type of flexibility in relaxing the usual requirements for a departmental major, but simultaneously there is a high requirement for credit in the division. A broader conception of an area of concentration traversing divisional and even college boundaries should be sought.*

Liberal Education for Women

In our increasingly complex society, the "woman's role" has gradually changed from the earlier, simpler concept of that of the helpmate whose responsibility it was to assist by activity within the home itself and to provide the family with adequate food, clothing, and shelter. Now many of the essential goods and services are supplied by sources outside the home. Increasing demands are made on the time and energy of women for participation in the labor force and in community services. Each family member requires intelligent understanding of his special interests and activities.

Women today have more time at their disposal in which to realize increased individual growth and to make greater contributions to society because today's women have their children at a younger age and enjoy a longer life span. With increased recognition of the importance of the family as the basic unit in our society and with wide availability of educational opportunities to be tapped, women are at the present in a position to make a greater and more effective contribution to society than ever before.

If this great potential is to be developed, higher education must examine the concept of woman's role in the light of what society expects of her. Perhaps one logical reason for the failure to do this lies not only in the fact that the definition of the role is complex; there is the additional complication that fulfillment of the role does not always follow the neat, logical sequence generally associated with the education of men.

Without recognition on the part of educators of the importance of educating women to assume their new role, we may find other roles emerging, which lead to frustration and lack of full achievement. The woman who exists as the "success symbol" of her husband is not unknown in our era. And, although the incidence may not be frequent among college-educated women, there are also the roles of the underpaid or unpaid domestic. In addition, one can scarcely ignore the existence of the intensively educated specialist who has difficulty in identifying herself with a multiple role-perhaps because of her very specialized approach to her education. These are not happy concepts of the role of women. They are enumerated simply to bring into sharper focus the need for re-examination of the current offerings of education for women.

Any consideration of the proper directions in which education for women should proceed might appropriately begin with an evaluation of the present situation and a set of reference values against which that situation can be assessed in order to establish program implications. Without attempting to focus attention on broader social problems which affect women as well as men, this report calls attention to several features of the current educational pattern and the current role expectations of women. The following empirical generalizations appear warranted:

The woman student. American society continues to hold the belief that college education for women is to be given second priority to college education for men. Given the possibility of providing college education for one child, families will provide this education for a boy rather than a girl. Although more girls than boys graduate from high school, only about one-third of the college population consists of women.

^{*} DISSUNTING OPINION: MR. LAURSEN.

To develop flexibility and provide a means for experimentation in educational programs, the establishment of a degreegranting, non-instructional college similar to the University College of the University of Minnesota would appear desirable. On the one hand, individual students could adapt the existing courses to an individualized program not available under existing curricula -- with the advice and approval of a faculty committee, of course. This use of the college might be particularly appropriate for the type of education suggested for women. On the other hand, new undergraduate curricula that do not fit naturally into an existing department or division might also make use of such a college for a trial period. If, after a trial, it is considered unwise to continue the program there would be no formal organization to be discontinued. This use of the college might be appropriate if, after further investigation, it is desired to experiment with a small liberal arts college.

Intellectual potential. Studies reveal that girls' high school achievement and ability is at least equal to that of boys. There is also evidence that of the brightest high school graduates who do not go on to college, two-thirds are women.

Role expectancies. Although various other roles come into play, and although these roles differ in emphasis from individual to individual and become prominent at different times in any individual's life, a great many women find themselves playing three major roles: (1) home and family roles, (2) gainful employment roles, and (3) citizenship or community participation roles. These are all roles in which education can potentially play a significant part in terms of preparation.

Change and flexibility. The performance of these roles probably requires a greater ability to change on the part of women than on the part of men. As the homemaker role tends to decline in time demand as children grow up, a void frequently develops in the life of the woman. Women's occupational patterns tend to change oftener as they accompany their husbands in geographic changes which occur as the husband continues to pursue his occupation.

Occupational pattern. The more education a woman has, the more likely she is to be found in the labor force. In 1957, whereas 37 percent of all women eighteen years of age or over were in the labor force. 55 percent of the college graduates and 42 percent of other college women (nongraduates) were found there. For married college women, 40 percent are in the labor force. Estimates based on 1950 labor force data indicate that at present the average work life expectancy without regard to differences in marital and work status is fifteen years. Other estimates suggest that nine out of ten women will work at least 25 years of their lives. Other data suggest that college women will have longer work lives than non-college women

Occupational opportunity. Although somewhat stereotyped in the occupational fields in which they are employed, women college graduates tend to be found largely in professional, technical, and kindred occupations (75 percent in 1957). Some women college graduates in the labor force (14 percent) are in clerical occupations and some (7 percent) are in managerial positions.

Family responsibilities. There are many indications that more of the women now being graduated from

college will marry and that they will have more children than in the recent past. In 1957, more than 68 percent of women college graduates 25 years of age or over were married and an additional 11 percent were widowed, separated, or divorced. The trend appears to be toward families of between two and four children.

Dual responsibilities. There has been increasing employment of mothers, although the effects of this upon the adjustment of children is still uncertain. In 1956, 36 percent of all married women living with their husbands who had children between 6 and 17 (but not under 6) were in the labor force; only 16 percent of those with children under 6 were in the labor force. This indicates a noncontinuous pattern in the labor force.

Civic responsibilities. Although the Committee has not accumulated specific data, it believes that women are taking an increasingly active part in community projects and particularly in the leadership of such projects. It further believes that increasingly the decisions in communities are being made by women.

As a means of meeting the educational needs of more women, the University should provide an optional program. Essential ingredients in this program would be the following:

An individual guidance system which would enable the individual student and an academic adviser to work out, within very broad limits of freedom and unrestricted by the college assignment of course offerings, a program adapted to the individual student.

The general outlines of the broad program should be developed by a group of interested faculty and should be pointed toward preparing women to meet the predicted roles in the years ahead. This program should be designed to provide for the development of individual uniqueness at the same time that it provides preparation for (1) the homemaking role of the woman, (2) the civic leadership role of the woman in American society, and (3) the gainful employment role of the woman in American society. The following is suggested as the basic outline for this optional program:

Basic General Education. The recommendations of the Committee relating to the Basic College and general education are appropriate parts of the program for liberal and professional education of women. As presently offered, basic general education would comprise approximately 25 percent of this program. Further Liberal Education. Uniqueness and individual identity can best be developed through a considerable emphasis upon a liberal program handled through competent interaction between a student and an adviser committed to such a liberal program. The program should include two types of further emphasis:

Our citizens must be aware of cultures other than their own. Specific suggestions that follow place emphasis upon the need for understanding the local, immediate community. In the "liberal education" portion of the program it is doubly important that students come to grips with the problems and contributions of foreign cultures, through work in such fields as world history, literature, foreign studies, political science, comparative or regional economics, anthropology, comparative religion, or foreign languages.

Our society must capitalize increasingly upon the creative and expressive qualities of the individual. Important as the history and criticisms are, we must not overlook the potential benefits of actual participation in the expressive arts. It is recommended that the liberal education program include participation in an area such as theatre, creative writing, art, music, or dance.

It is further believed that such an emphasis upon liberal education is in keeping with the general philosophy of a university education. This "further liberal education" should comprise between one-third and one-half of the program. Combined with the basic general program, this would provide in all cases over one-half of the program and in most cases almost three-quarters of the program.

Homemaking role. Three areas of emphasis in the development of effective homemakers might be given a place in the program: (1) human growth and development, (2) decision-making and resource allocation in the American home, and (3) the home as a cultural milieu—a normal extension of the personalities of its members and an environment for the cultural development of the young. (This portion of the program, 5 to 10 percent of the program hours, would capitalize upon the resources of the College of Home Economics.)

Civic Leadership Role. Additional emphasis should be placed upon civic leadership. Three areas are suggested: (1) the political structure and operation of local government, (2) nonpolitical elements of community organization and action, and (3) the principles of community and group interaction. If at all possible, direct community involvement should be de-

veloped to bridge the gap between "theory" and "practice". In this connection, it is recommended that consideration be given by women students to participation in the non-credit activities of the Citizenship Clearing House or to enrollment in field work courses. (This portion of the program would require between 5 and 10 percent of the total program hours and would capitalize on the strength already existing in the University in the fields of political science, sociology, education, the citizenship education project, and the Institute for Community Development.)

Gainful Employment Role. Women should be given the theoretical and technical background which will enable them to develop in a chosen career, either on a part-time, full-time, or intermittent basis. Occupations to be considered include foods technician, general business understanding, elementary teaching, secondary school teaching, chemistry technician, bacteriology technician, social work, journalism, personnel. (Sufficient theoretical and technical background can be given in as few as twenty-five credits in some areas. Other areas may require as many as sixty hours. There are some occupational choices too restrictive to be administered through this program. Occupational concentrations should be made from fields in which a professional school with wide offerings or a wellestablished professional discipline exists.)

Administration of the Program

This program should be developed and furthered by the appointment of a woman as Director of Education for Women, responsible to the Provost, to gain necessary resources and recognition for the merits of the program. The program should not be characterized by a teaching faculty of its own, but it should certainly include an advisory faculty from many fields within the University. The director should be consulted about the designation of academic advisers in the several departments for individual students working out programs within this general framework.

Additional Considerations

American education is not tapping the intellectual potential available among women. In addition to program developments, the colleges and universities should find ways to lower the economic barrier which currently prevents many able high school girls from going on to college.

The long-standing prejudice which exists against the educability of women in the more rigorous and exacting disciplines is often still with us and must be overcome. The sharp distinction between "marriage or a career" continues to exist in the minds of many women students and many persons who are advising them. A more realistic understanding of the contribution of women to the professions must be made clear to academic advisers.

Universities must be careful to reveal by their practice as well as their preachment that they believe in tapping the intellectual resources of women. University policies and practices concerning hiring, salaries, leaves of absence, and tenure should not differentiate between men and women.

The education of women is particularly cogent to university adult education; experimentation in relating undergraduate programs to continuing study; employment of the various adult educational media for continuing education in relation to marriage, family-rearing, and community participation; and the re-education processes of facilitating a return of women to the labor force.

Preparing Potential Military Leadership

Recent developments have created considerable concern regarding the ROTC program at Michigan State University. These developments include a reexamination of the requirements for compulsory basic ROTC instruction, and the failure of the federal government to provide meaningful support for legislation authorizing aid in the construction of ROTC facilities. There has also been a failure on the part of the Department of Defense to provide a clear definition of the relationship of the ROTC programs to the manpower needs of modern military strategy, as well as to define a more fruitful basis for collaboration with American higher education.

The current basic ROTC course is a total of 160 contact hours spread over 2 years. This is approximately equivalent to a month's military training. The advanced course is a total of 18 credit hours plus a one-month summer camp. Current participation in the Army and Air Force ROTC programs at Michigan State is as follows:

	ARMY	Air Force
Freshmen	744	592
Sophomores	441	419
Juniors	120	45
Seniors	83	49

It has been said that a compulsory program enables a Military Science Department to be much more selective in screening applicants for advanced officer training, but only a slightly higher percentage of the total male graduates are commissioned through the ROTC programs in colleges and universities having compulsory programs during the first two years than in those offering voluntary programs.

	1957		
Computsory		VOLUNFARY	
No.	Percent of	Nο	Percent of male graduates
	, ,		0.4
			8.9
144		86	
213	0.3	150	0.2
3,042	4.5	2,262	3.7
66,946		61,600	
94		90	
416	1.6	784	2.3
354	1.4	717	2.1
26,067		33,823	
17		35	
	No. 467 8,558 75,471 144 213 3,042 66,946 94 416 354 26,067	Computesory Percent of No. male graduates 467	Compulsory Volume

In arriving at a decision concerning future ROTC programs, a rather thorough study of the problem is available, Lyons and Masland, *Education and Military Leadership* (Princeton, N. J., Princeton University Press, 1959). Recommendations for the future role of the ROTC programs at Michigan State University are based on information principally from this source. The recommendations are based on the following considerations:

The primary purpose of the ROTC program is to furnish career and long-term officers of the highest caliber and dedication. These professional officers must have both a broadly based educational background and specialized and intensive advanced preparation.

The current compulsory program is an intrusion on the educational process and a negative factor in career motivation. As enrollments increase, the financial burden on Michigan State University to support compulsory ROTC will increase.

In view of these considerations, it is suggested that:

The compulsory requirement of the ROTC program should be abolished effective with the fall quarter, 1960.

A joint Faculty-Military Committee should be formed to investigate in cooperation with the military services a new, voluntary military education program, replacing the present compulsory program. This program should have the educational content and stature of any other field of study. It should be composed of an academic major in a department or division of an appropriate college, plus the necessary military courses, with provision for enrollment by a specially designated adviser who will plan the student's program of courses in consultation with the commandant of the appropriate branch of the military department or his representative. The program should be designed so that transfer students could participate. Courses for officer training should include languages, geography, international relations, and economics as requirements. In view of the changing necessities of officer training for the military services, it is believed that such a program would be far superior to that now presented.

Experimental Liberal Arts College

A third means to increased emphasis on liberal education at the University might be the introduction of a small experimental college emphasizing a liberal arts program. It was not possible for the Committee on the Future of the University to consider such a proposal in detail, but it is recommended that further study of the need for and purposes of such a college be investigated.

It is not possible to foresee all the needs for future liberal arts curricula. However, the new Educational Policies Committee of the faculty, attached to the Office of the Provost, should be charged with a constant consideration of such needs and the institution of new programs when the need arises and with the development of policies relating to the total educational program of the University.

Compulsory Physical Education

Michigan State University, like most universities in the country, has a compulsory physical education requirement for all students. A recent study conducted by the National Collegiate Athletic Association showed that more than 85 percent of the universities and colleges surveyed required one or more years for male students, and about 70 percent have a required program for women.

The physical education program at Michigan State requires that each student shall (1) be able to swim, (2) complete the course in Foundations of Physical Education, and (3) complete a total of six credits of instruction. Each credit requires three class hours per week for one term.

Foundations of Physical Education has the following stated objectives: (1) to acquaint students with the recent advances and scientific knowledge related to physical fitness and health; (2) to develop attitudes to motivate students to be active in maintaining their physical selves now and in the future; (3) to aid students in obtaining a realistic self-image; (4) to present physical training techniques that may be used to change students' level of fitness and to offer the opportunity to experience training changes; (5) to assist students through counseling and guidance in the selection of activities which will best meet present and future needs; (6) to increase awareness of the pitfalls present in our culture which are detrimental to physical well-being and to show how they can be avoided; (7) to provide students with information concerning wise exercise programs for later life; (8) to acquaint students with the nature, location, and proper use of physical education and recreational equipment and facilities; (9) to acquaint students with a wide variety of sports.

Facilities for organized recreation and physical education at Michigan State are excellent. With the recent addition of the intramural buildings, we have space for nearly all the sports in which students can participate. We have the facilities for individuals, intramurals, and the varsity teams, and if such space is properly administered and used, varsity teams should not find it necessary to prevent other students from using intramural facilities.

The problems of leadership and organization are two of the most crucial aspects of a program of physical education. At present, the head of the Department of Health, Physical Education, and Recreation is responsible to the Dean of the College of Education; the administrative control for Intercollegiate Athletics rests with the President of the University and the Athletic Council. The Intramural Program is operated separately from the academic department.

All students should be required to take the course in Foundations of Physical Education. Students should receive a grade and credit for this course, but the grade should be on a satisfactory-unsatisfactory basis and not be considered in all-college grade point averages.

If the results of the testing program in Foundations of Physical Education show need for additional courses, students should be encouraged—but not required—to take additional courses for credit.* Grades

and grade point averages should be treated as in the preceding paragraph.

In order to preserve the identity of academic departments, the Department of Health, Physical Education, and Recreation should be organized as a separate academic department with its leadership divorced from the Department of Intercollegiate Athletics. The Department of Health, Physical Education, and Recreation, the professional physical education program, and the intramural sports programs, should be under the jurisdiction of the College of Education. The Department of Intercollegiate Athletics should be responsible to the President, through the Athletic Council.

[•] A minority of the Committee feels that up to five more credits in physical education should be required. Such a program would permit and encourage students to waive part or all of these additional credits on the basis of proficiency indicated by the testing program.

The Graduate Program

Graduate work and research lie at the heart of scholarly endeavor. The achievement and reputation of the University will increasingly depend in large part upon an excellent graduate program. Moreover, graduate work of high order of excellence is important to research and teaching in the arts and sciences and in the professions and is also coming to play an important part in the preparation of leaders in business and public service. The Committee recognizes that there are serious lags in our graduate programs in some fields and would emphasize the necessity of immediate efforts to make up these lags and to establish fundamental long-term developmental efforts to fulfill our responsibilities for leadership. In particular, the allocation of resources in the future must reflect the central relevance of the graduate program to every aspect of the University's life.

In general, it is the Committee's conviction that modern society will place increasingly greater demands on the moral, spiritual, and intellectual resources of our future graduate students. They will live and work in a fiercely competitive climate of big labor, big business, big government, and big private and public interest groups. Internationally, the United States has assumed a role of leadership in the free world, thus accepting formidable responsibilities which expose it to the hostile pressures of powerful totalitarian states. The only certainties for the future appear to be an accelerated tempo of domestic change and our increased involvement with the rest of the world.

The development of graduate programs to produce top-level professional and business leaders, and prac-

titioners capable of dealing effectively with problems yet unseen, is a task demanding our most serious efforts. It can be achieved only by finding new ways of relating underlying theory and knowledge to the developing problems of society, a task peculiarly appropriate to our land-grant tradition.

In the last analysis, the goal of those graduate programs which lead to doctoral degrees is to produce individuals capable of creative scholarship which will move forward the frontiers of human knowledge. Such programs must be built by those most intimately associated with them. Productive scholars, working in an atmosphere of free inquiry, are our surest resource in building programs which will develop in students the thirst for knowledge, the breadth of vision, and the devotion to truth which our world so sorely needs.

Since the faculty and administration have been extensively involved during recent years in considering the direction and policies pertaining to the graduate programs of the University, this report does not attempt to cover all the areas pertinent to this subject. Instead, it attempts to point up a limited number of recommendations in the areas which are felt to be of vital importance for consideration by the Graduate Council and its committees.

The essentials for excellence in graduate programs are (1) freedom and flexibility in our programs, (2) faculty members and administrators of high scholarly competence, (3) careful selection of the fields of knowledge in which graduate programs will be offered, and (4) adequate facilities to support the programs offered by the University.

Since excellent programs are dependent on an outstanding faculty, graduate program administrators and faculty should be selected on the basis of scholarly interests, abilities, and reputation.

Special attention should be given to the appointment of administrative personnel who exhibit substantial evidence of scholarly achievement and strong leadership qualities, as well as administrative ability.

The present decentralized system with its heavy emphasis upon the responsibility of the faculty guidance committee for each program places the ultimate responsibility for the programs on the department faculties. This system should be continued.

The several colleges of the University should be encouraged to take initiative in developing high-level graduate and professional programs. Because strong graduate programs require concerted planning at the appropriate level, the development of graduate faculties in the colleges may be appropriate. Such faculties would regularly teach in and contribute to undergraduate programs, and would provide a structure for graduate planning and a focus for leadership.

The various colleges should be given maximum autonomy and adequate budget support in building graduate programs and graduate-level faculties and facilities.

The responsibilities and functions of the Dean of the School for Advanced Graduate Studies should be clarified and the colleges informed so that they may, in turn, develop policies and procedures which will supplement the central purposes and which will be consistent with maintaining quality throughout the University.

The graduate programs in the fundamental areas must be strong not only in their own right but also to provide the basic theoretical training essential to the applied areas they serve.

Programs

Departments and colleges and the Dean of the School for Advanced Graduate Studies should force-fully exercise their right of inquiry and review to insure that the highest professional standards are being observed. Off-campus graduate programs should be held to the same high standards maintained in on-campus programs. The Office of Evaluation

Services should recommend appropriate instruments for estimating performance potential of graduate students.

Master's Programs. The master's degree in many universities has unfortunately come to be regarded merely as an additional year of undergraduate work. However, many individuals who receive the master's degree are involved in creative work and need research experience in and enthusiasm for their discipline in addition to mere technical knowledge. Every effort should be exerted to make master's programs genuine advanced study programs.

In departments where the large number of candidates makes the requirement for a thesis and/or examination impossible to administer, other means of evaluating performance should be developed.

Special Master's Degrees. To provide a meaningful educational experience at an advanced level for individuals in a number of occupations, a special master's degree is necessary. This is particularly true in primary and secondary education, in various branches of the civil service, and in some areas of business and government. The background of technical knowledge and the particular needs and interests of these individuals is often different from that of graduate students who anticipate careers in research. These programs require course offerings of a different nature from those of the conventional master's degree, in presenting recent ideas and advances in a specific field.

Doctoral Programs. These programs should be designed to develop creative, imaginative, enthusiastic scholars who have obtained a breadth and depth of knowledge which permits them to know and master their specific fields and contribute new knowledge in those fields.

The central administration and Educational Policies Committee should continue to examine the need for expanded facilities for the professions of law, medicine, architecture, etc. At such time as it should be appropriate, plans for training in such professions should be formulated.

University regulations should be amended to provide some stipulated channel of recourse for the student to safeguard his program from (I) whimsical changes by his guidance committee and (2) changes in program direction due to changes in committee membership.

Consideration of Special Needs of Foreign Students

Special needs of foreign students should receive more attention and understanding on the part of the faculty and other graduate students. Although unintentional, the present approach seems to separate foreign students into a group and to place responsibility for their welfare with a comparatively small segment of the faculty. The contribution which these students and the University could make toward better understanding of cultures is thus minimized.

Each foreign student should be provided with an American "counterpart" who would assume responsibility for helping him in campus and cultural adjustments.

More effective means for screening for language competence should be developed, and more effective remedial measures should be instituted where there is indication of less than satisfactory competence. Present screening methods may not be based on determining the kind of competence required for facility with examinations, comprehensive reports, etc.

Means should be provided to assist students with language problems, especially on writing examinations or term papers. A student might write examinations in the language in which he has greatest competence and pay a fee for an English translation. Oral examinations might be highly successful in other cases. (This should be accompanied by evidence of intent and progress in mastering English, however, and should not be considered a substitute for learning English.)

The very broad policy of regular admission to graduate programs on the basis of transcripts should be re-examined. Often it is not a kindness to foreign students, especially those whose backgrounds in science are often deficient in laboratory experience, to permit them to undertake work based on thorough knowledge of methodology. They should be advised to take the necessary collateral work or to enroll as special students.

Consideration should be given to granting recognition to foreign students (other than the conventional degree) if a meaningful program can be worked out for them. Even though such a program does not correspond precisely to our established graduate programs, it may be more appropriate for them. A Gertificate for Visiting Scholars has been suggested as a means of recognition.

Some special consideration for a foreign educator studying here might be mutually beneficial to the scholar and to the department with whom he is most closely allied. A special staff appointment for him might service this purpose.

Orientation and Its Relation to Graduate Performance

A meaningful orientation should be developed by each college to acquaint its graduate students with the expectations and requirements of its graduate programs, philosophy, and purpose. Such a program should be offered as early as possible after the student enrolls for graduate study. The administration of some parts of the program might be at the college level; other phases might lend themselves to more effective handling by departments in smaller groups.

A non-credit course in actual use of the library should be offered.

A review of ongoing research programs and an explanation of how graduate students may fit into them should be undertaken each year.

University cultural opportunities and services should be explained.

Off-Campus and Evening Graduate Courses

Graduate courses taught in off-campus centers and those taught at night (specifically for students who commute to attend) pose special problems in maintaining standards of quality. Access to library materials and out-of-class contact with instructors seem especially difficult.

Instructors should work out methods with the library for making available the necessary supporting

materials through special budgets, reprints, and copying service.

The colleges should strengthen and maintain residence requirements for graduate degrees sufficient to ensure program quality and continuity. Such requirements should regularly include an appropriate period during which full time is devoted to work at the University.

Library Facilities

If higher scholarly standards are to be achieved, provision must be made to assure that there are adequate library facilities. Regardless of the amount of review and the quality of the faculty, graduate work at the University cannot be accomplished if the library resources are inadequate. Any department which desires to offer a new program should consult with the Director of Libraries regarding facilities to support the new area of study. It is important that library holdings be developed early and at least concurrently with venturing into new graduate programs.

Graduate Study Residence Halls

Recent recognition of the importance of providing separate housing for graduate students and improved arrangements for their meals is very encouraging. It is hoped that this forward step will relieve the student of these concerns and permit him thereby to concentrate upon the primary objectives of his graduate experience.

The residents of the graduate units should be encouraged to develop a scholarly climate within their halls. Faculty should encourage this effort by participation in informal group discussions, seminars, etc.

Facilities in graduate residence halls should be made available at reasonable cost for visiting scholars and graduate students.

Financing Graduate Work

The recommendations elsewhere in this report would mean a large increase in the number of graduate assistantships and teaching fellowships. Such increases are essential if a satisfactory level of financing of graduate work is to be achieved.

As many fellowships as possible should be supported by the General Fund, administered by the Dean of the School for Advanced Graduate Studies. All departments eligible for participation (on the basis of quality graduate programs in the respective areas) should be able to draw upon this source for fellowship support. Strong priority should be given to fundamental disciplines and to fields not now adequately supported by funds from the federal government or other sources.

Stipends for assistantships should be realistic in terms of living costs and should be subject to annual review and adjustment if indicated. Regular studies should be made of stipends offered by other universities and adjustments made to give a reasonable chance of success in attracting able graduate assistants. Likewise, there should be flexibility as to reimbursement and classification of individuals undertaking advanced training (e.g., fellows, assistants, associates).

College and department administrators should be encouraged to regard their budgets as sufficiently flexible to permit assignment of available funds to the support of graduate work (temporary assistantships).

It should be possible to appoint research assistants on a 12-month basis, with appropriate stipend adjustment. In many instances, this would be mutually beneficial to the assistant and the department since many research programs are carried out by staff on 12-month appointments. Flexibility is desirable in setting stipend according to applicant's ability in order to (1) attract the best students, and (2) relate stipend to ability and level of attainment.

Allocation of resources in the future should give special consideration to the cost of materials and faculty time necessary for achieving and maintaining outstanding graduate programs.

Research

Research is one of the most important activities of every great university. Through their research, the nation's scholars make invaluable contributions to knowledge, to health and productivity, and to the survival of the nation. Increasing emphasis upon research is an absolute essential, therefore, if only because of its value to our society at large.

Research should be emphasized for another important reason. The main functions of a university can be defined as *teaching* and *research*, and the ideal we have established elsewhere in our report is the ideal of the professor as *teacher-scholar*. It is our belief that the active research scholar, excited by the quest for knowledge and by the constant acquisition or creation of new knowledge, will be the truly outstanding teacher. We would add that the research scholar must always be aware of not only his responsibility to discover new knowledge but also his duty to disseminate it to the best of his ability in the classroom. If the nation is to increase its staff of great teachers, it must provide the facilities, time, and incentives necessary for research.

At Michigan State University, with its increasingly excellent faculty and its growing professional and graduate school populations, the need to expand and improve our research performance in the future is imperative. Significant changes must be made if research is to be given adequate emphasis in such a way that it will enhance and complement the fulfillment of our other obligations.

The task is neither easy nor simple. Our manifold obligations complicate the problems we must solve. Our administrators and professors are burdened with a multitude of duties, many of them the unavoidable consequences of our rapid growth. We must decide

upon the proper emphases to be placed upon research in relation to our other responsibilities. We must overcome serious shortcomings in our library holdings and our laboratories and in a variety of technical facilities. At the same time we are endowed with special strengths in certain areas of knowledge, and the decisions we make concerning fields to be emphasized should take advantage of these strengths. Research has mounted in cost until some areas are almost too expensive to enter, yet too vital to ignore. All segments of our faculty and administrative personnel must realize the integral relationship between teaching and research. The general public which does not fully understand the immeasurable value of research to society must be better informed; and, because research is hard and slow, often with results not immediately discernable, and always expensive in terms of money and time and thought, public support must be increased. Great care must be taken to assure that research is not sacrificed to activities which do not make those sound contributions to knowledge and teaching which every great university must consider its first duty.

The Committee views the task of stimulating and encouraging research as a complex problem which involves at least three main factors, each of which appears to be almost inseparably related to the others. These factors are: (1) policy-making for research; (2) recruiting and holding outstanding research scholars and facilitating their work; (3) financing research.

Faculty Research Committee

In order to assist the Vice President for Research Development in serving the research needs of the faculty, a group of competent, productive scholars should be involved in research policy-making. The advice and assistance of our active research workers should be sought at all levels of administration.

In order to systematize the policy-making process for research:

The University should establish a Faculty Research Committee charged with responsibility for helping to define the research policy of the institution.

The committee should be composed of three representatives from the College of Science and Arts and one representative from each of the other colleges. The Committee on Committees should nominate, to be appointed by the President, a slate of candidates of proved research ability. The Vice President for Research Development should serve *ex-officio* on the committee and administer the policy thus determined.

The committee should advise on fields of selectivity and distinctiveness as outlined below, should approve grants from the University Research Fund, and should advise the Vice President for Research Development concerning suitability of major research projects financed from outside sources.

Research Selectivity and Distinctiveness

The national and international academic reputation of every university rests mainly upon the quality and distinctiveness of the research and scholarly activity of its faculty and graduate students. The quality of research in a given area is a reflection of the competence of the faculty in that area. Good research therefore requires competent faculty members and provision of all possible aid and support for them in their scholarly work. Distinctiveness, on the other hand, may best be achieved by careful program planning for research at all levels from the individual and department to the college and university as a whole.

Policy

To aid the faculty and administration in selecting areas in which the University should maintain a vigorous research program, the Faculty Research Committee should help to define policy.

The committee should stress, as a minimum, the fundamental fields of knowledge. The main, although not the sole, objective of research in these fields is to contribute to knowledge. Distinctiveness is therefore dependent upon the originality and imagination of the individual faculty members working in these areas. Initially the distinction of the individual faculty members should be the guide for establishing fields in which special emphasis should be given to research in the fundamental areas. After a research field has been well established and the University is known as a leader in this field, new faculty should be hired to continue and supplement this research field as long as it is pertinent. Within the fundamental disciplines new concepts will continually be conceived either at Michigan State University or at other institutions. Faculty members on our campus who are developing new concepts should be supported to the utmost. Exploitation of new concepts should be pursued by every possible means including the hiring of additional staff.*

* DISSENTING OPINION: MESSRS, HAZARD AND HANSON

We believe that the Committee has assumed a false dichotomy by drawing a somewhat nebulous line between fundamental fields and others that, presumably, are not fundamental. While we share concern with the Committee for the need to expand fundamental knowledge and to strengthen the underlying disciplines, we have grave reservations about attempting to do so by artificial distinctions. It would be unwise and inequitable for the Faculty Research Committee to discriminate between fundamental and applied research in the distribution of our "freed" research funds almost exclusively or with any reference to the instructional units from which projects happen to emanate. To do so would be to neatly compartmentalize knowledge, to box-in the perimeter of our research, and to jeopardize the fundamental contributions that may come from distinguished faculty housed in other than traditional departments.

Additions to knowledge have been and will continue to be made by virtue of invention, discovery, scholarly insight, and by unconventional approaches to cross-disciplinary problems as well as by formal research in established disciplines. The attributes of discovery are remarkably individual; the process of research is not neatly defined. In no instance are either these attributes or this process the exclusive province of any given organizational unit. Therefore, the assessments of the Faculty Research Committee should be uniform and its decisions should turn on the individual, the project, and the approach without reference to the particular instructional unit of housing. This would avoid compartmentalization of knowledge, and release more fully the capabilities of an increasingly eminent faculty in some of the professional colleges, to the end of enhancing the University's total contribution in the search for truth and the expansion of fundamental knowledge.

In comparison to research in the fundamental disciplines, the professional fields are often somewhat more concerned with the problems of society. Selection of research in the professional fields should be based to a greater extent than in the fundamental fields on the importance of solving some problem of society and upon the distinctiveness of the problem to be studied. Faculty in the professional fields do, of course, undertake research which will contribute to knowledge but not directly concerned with an immediate problem of society. Such research should be judged for quality and distinction along with the work of faculty members in the fundamental fields. Selection of research in the professional areas will require constant surveillance in the various fields to identify problems with which society is becoming concerned, and to identify problems which are no longer of significance and therefore should be eliminated as research fields.

In any case, great care should be exercised to avoid involvement in research largely to acquire funds or publicity, especially where such commitments would impinge upon general research funds of Michigan State University.

Decisions concerning acceptance of research grants should be made in accordance with the predetermined interests of the University, with care taken always to avoid infringement upon the liberty and initiative of the individual.

Personnel

An outstanding research faculty is essential. If we are to improve our ability to recruit the best research people and to hold those now on our staff, important changes should be achieved. These may be grouped under two general headings: *The Intellectual Atmosphere*, and *Research Facilities and Services*.

The Intellectual Almosphere

It is obvious that we cannot hope to produce great research without attracting to our campus some of the best scholars of the world. Nor can we long continue to lead the scholarly world in any field, if we cannot hold the newly acquired research worker as well as the productive faculty members already on our staff. The solutions to these problems cannot be found simply in the provision for higher salaries. We should do everything possible to develop a climate of opinion conducive to the search for knowledge and make unmistakably clear the University's high regard for research.

Since the research scholar himself is the center around which all research efforts must focus, steps should be taken to let the research worker know that his interests and needs are understood and supported.

Administration

Administrators should be made increasingly aware of the research process and of the needs of the research scholar. This could be accomplished by a more rigid insistence upon genuine research competence in those chosen for high administrative positions, and by the establishment of term appointments to academic administrative office which would encourage administrators to remain active in their academic fields.

The department head has very great responsibilities for the encouragement of research. With assistance from high administration, department heads could bring about important changes by placing more emphasis upon the value of research and by being more sensitive to the research plans and needs of their faculty. At a minimum they should do the following:

When possible, teaching schedules should be arranged in accordance with the individual faculty member's research time needs.

When possible, teaching loads should be lowered or adjusted for the greater convenience of the productive scholar.

Departments should carry budget funds to provide research time for faculty members.

Additional research time could be achieved by rearrangement of class section sizes, by allowing the faculty member to carry larger than average teaching loads for some quarters, by departmental examination of course proliferation and elimination of unnecessary or unprofitable small courses, or by the establishment of large lecture classes. Vigorous intradepartmental experimentation could aid such research time available.

Additional research professorships should be established in every department with endowment funds when possible. These should be rotated through the department according to need and proved competence. Assignment to these positions should be for a minimum of one year.

Recognition

To encourage research, the productive faculty member should be given recognition in meaningful ways. Among these should be Distinguished Research rewards in such areas as the natural sciences, the social sciences, the humanities, and the various professional fields; and marked salary differentials for the outstanding scholar-teacher.

Opportunity for publication of writings of a scholarly nature is quite limited at Michigan State. The administration should encourage a more active program of subsidizing and publishing outstanding scholarly periodicals and monographic studies.

Cooperation

The research worker must work with many different parts of the University — the business office, procurement offices, the library, etc. In many cases at present, his needs and his work are given lowest priority by people who do not understand and have little sympathy for his work. This should be changed. Service and clerical personnel should receive brief in-service training which explains the purposes and values of the University and the role of the faculty. Supply and service organizations which serve several publics should also be geared to work with the research worker, and the business office should develop accounting procedures, etc., directed toward saving the research worker's time.

Research Facilities and Services

Library

A university cannot achieve greatness without a great library. The library at Michigan State University must play the dual role of servicing an increasing number of undergraduate and graduate students and simultaneously meeting the demands of an expanding research program. In the present building, and with the limited size of the collection, it is most difficult to meet the requirements of both groups — i.e., the administration of a mass circulating library for undergraduates is quite different from that of a reference library for research. Since the demands of the large numbers are more obvious, these have most often been

given first priority. As the nature of Michigan State University changes, however, much more emphasis must be placed on developing and servicing research needs.

The importance of the library to the research activity at Michigan State University must be recognized. We could spend at least \$1,000,000 per year for necessary research items. Extraordinary expenditure is especially necessary because the library is in the difficult situation of having to build research collections that have been ignored in previous years. For the past three years, expenditures for library materials have kept us from falling further behind other universities, but there is much to be done.

Personnel must be provided to process and service materials received. At present the library has the smallest staff among the Big Ten universities. It is difficult to hold outstanding professional staff because of our low salary scales. For adequate performance at even the minimum level of service expected by our faculty and students, there is immediate need for several new positions. As the book budget increases and as new services are demanded to fulfill the research needs, as well as the whole range of other services performed by the library, further additional staff will be required.

Other Services

Research personnel should be supported by a greatly increased number of research assistants, typists, and student personnel. In many areas technical assistance should also be supplied.

The service agencies on the campus — the library, the museum, and stores, purchasing, buildings and utilities — should give higher priority to serving the researcher's needs. The library, for example, should complete its faculty cubicles; purchasing should expedite faculty requests; technical service personnel (e.g., electronic technicians, glass blowers, and a central shop) should be provided.

Major facilities (e.g., buildings and major equipment items) should be provided in those areas in which academic distinctiveness is desired at Michigan State University. This demands long-range planning, with faculty advisory committees involved. Plans should include construction of large classrooms and buildings in which scattered and overlapping research could be housed under one roof with increased efficiency and better facilities.

Financing Research

There should be established a University Research Fund to include (1) major new allocations from the General Fund and the present All-University Research Fund, (2) unattached grants and gifts for research from any source, (3) fees from University-owned patents, and (4) the overhead allowances from other research grants received by the University. Grants from this fund would be recommended by the Faculty Research Committee, based upon recommendations and proposals screened by college research committees and upon availability of other funds, for research-related items such as released faculty time, expensive equipment and facilities, labor and supplies, and travel and subsistence.

The Vice President for Research Development should actively seek funds for the University Research Fund. His office should seek to establish contacts with new sources of unattached funds — particularly with industry. However, it must be recognized that a sizeable research program will depend heavily on spon-

sored research and that growth in research activity at Michigan State University will be in direct proportion to the number of faculty members obtaining sponsorship. Therefore, research ability and interest as well as teaching ability and interest should be a primary consideration in the selection of new staff. The Vice President should encourage the teacher-scholar by and in finding sponsorship and by support from the University Research Fund in accordance with the policies developed by the Faculty Research Committee and the Vice President for Research Development.

Unrestricted funds from special appropriations; i.e., Agriculture Experiment Station, Highway Traffic Safety Center, and Labor and Industrial Relations Center which are available for research purposes, should be allocated in accordance with policies recommended by a faculty advisory group of active and productive research scholars in the specialized fields. It is assumed that these funds would be used for appropriate studies on the basis of an evaluation of the project and the individual research worker rather than upon the departmental connection of the applicant.

The "Off-Campus" Programs of the University

The application of the University programs to the solution of the problems of individuals has been one of the basic tenets of the land-grant philosophy. Rapid changes in technology and the increasing social and technical problems of communities will increase rather than decrease such needs in the future. Recently, the needs of other nations for similar assistance have been recognized and our programs have been extended abroad.

In a sense, the term "off-campns" programs is a misnomer, for, if useful and successful programs are to be maintained, they must be extensions of the basic activities of the University. Only programs based upon sound knowledge and involving able, dedicated faculty members contribute to the growth of the total program of the University.

Criteria

Experience in various types of adult education programs in Michigan and elsewhere has contributed to the formation of a number of criteria which should be applied to existing and proposed projects in the years ahead. These criteria are:

Programs should be relevant to the central purposes of the University and an integral part of its ongoing activities. Off-campus programs should be intellectual, educational, and of creative service to citizens in their individual and community lives. While at times the initial project may be an agency activity, it should become consonant with the University's larger program.

Projects should deal with advanced subject matter, reserving for the public schools or other organizations subject matter not appropriate to a university.

Projects which offer the greatest learning and research potential for the students and faculty of the University should be given priority.

Since it is the function of a university not only to "educate" but to improve education, priority should be given to those projects which pave the way for the improvement of adult education carried on by other colleges, public schools, and voluntary agencies.

The Coordination of Educational Activities

To be most effective the total educational program of the University must have effective coordination. Such coordination should be in the Office of the Provost, and individual programs should be subject to the general policies and review of the Educational Policies Committee. Reviews of the policies of the international programs, the Cooperative Extension Service programs, and the Continuing Education programs should be made by an Off-Campus Programs Committee, functioning essentially as a subcommittee of the Educational Policies Committee.

International Programs

The University should take pride in the rise of an international perspective in the life of its academic community and in its extension through developmental programs to several other countries of the world. The increasingly pervasive interests in international affairs at Michigan State University should continue to be encouraged. Two aspects of these interests

require identification. The first is the necessity of including naturally the international interests as a vital dimension of the various academic disciplines and arranging for this dimension to enrich the scholarly community of students, teachers, and scholars. The second aspect is the imaginative establishment and conduct of programs in other countries and the active interplay of such programs with on-campus activities.

The Dean of International Programs should be a staff officer to the Provost, in those matters relating to academic affairs. International programs and all educational activities dealing with foreign areas or international problems, be they technical assistance, research, or teaching oriented, should be completely under the control of the regular academic units (colleges, divisions, or departments) and not attached to a central office. The Dean of International Programs should have responsibilities of a promotional and developmental nature in the entire international field. He should assist the regular academic units in their work, and engage in financial and contract coordination in regard to international technical assistance programs.

All international programs should be located in the regular academic units in which the principal focus of the program naturally falls. In those rare instances where there is no principal focus, a program should be administered by a project coordinator, selected by a corporate-type body representing the faculty of the departments or colleges primarily concerned. Sub-coordinators in each subject-matter area should then be designated, attached to the regular academic units involved.

Recruitment of personnel for all international programs, whether they be technical assistance, research, or teaching, should be carried out by the regular academic units, whether the appointments are temporary or permanent. Only in case of default in recruiting by a unit should recruitment be done by an international program coordinator and then only for purposes of temporary overseas assignment.

Policies concerning international programs should be the responsibility of the same policy committees that exist for the other academic programs of the University. Central policy advice should be the responsibility of the Educational Policies Committee. This committee should function in regard to policies concerning international programs in the same manner as it functions in regard to other general educational policies. For more detailed policy consideration and program review, three other committees would be

available (whether functioning as subcommittees of the general committee or not). These committees are: (1) The Faculty Research Committee; (2) The Off-Campus Educational Policies Committee; (3) The Course and Curriculum Committee.

The above committees may desire to work through subcommittees from time to time, including an international programs subcommittee. In any event, it would be unnecessary and unwise to create at the University level a permanent special committee for international program purposes or for other special purposes, given the committee structure just outlined.

Specialization Within International Programs

Two general principles need to be followed in developing and strengthening international programs at Michigan State. First, the international programs should be administered and selected to strengthen the regular academic departments rather than to go around them. Second, it would be manifestly unwise for the University to go into the entire international dimension of higher education. We must be highly selective in the international sphere as well as in any other sphere. To do otherwise would dissipate our resources.

Among the criteria for selecting international programs are the following: Programs should draw on the comparative advantages and strengths of the University. They should contribute to the development of the faculty either in their research or teaching capacities. In technical assistance programs overseas, the development of educational institutions should be the prime criterion.

Given the emphasis upon selectivity and the emphasis upon strengthening the regular academic departments, the basic approach to international programs should be one of subject-matter emphasis. It is important that the faculty of the regular academic departments develop subject-matter or problem approaches to research and teaching in the international aspects of their disciplines on a selective basis.

It appears unwise for us to develop area programs. Area programs were especially developed as a result of the exigencies of World War II. Their contribution to knowledge has been limited, and, of equal importance, their relationship with the regular disciplines and departments has been minimal. The great disadvantages of area programs and interdepartmental committees

with their tendencies toward separatism should be avoided.

It is sound as an educational principle and as a practical matter to encourage scholars from the various disciplines to select from among the same countries in determining the location of their field activities in technical assistance or research. For example, scholars might be encouraged to concentrate their activities as far as possible in such countries as Canada, Mexico, Colombia, Brazil, Nigeria, Italy, one of the Iron Curtain countries, Pakistan, Vietnam, and Japan-Ryukyus. These are countries in which our staff has certain present advantages or strengths. Concentrating on such a sample of countries would permit the effective acquisition of library materials and the development of suitable language facilities. It would also give a sufficiently large sample of countries so that those interested in any subject matter could select one or more of these countries as the country focus for their technical assistance, research, or teaching program.

The Cooperative Extension Service

Extension education in the land-grant universities has made an important contribution to adult education and constitutes a great resource for future programs. Cooperative Extension Work in Agriculture and Home Economics is a national system of informal adult education which represents a synthesis of three levels of government and the land-grant colleges and universities. It is an almost upside-down system of official organization which is devoted to service and education and to the creed of the grass roots. Emerging from an agrarian past and facing into complex technology with its accompanying sociological problems, the Cooperative Extension Service is still incompletely assessed as to its future role in higher adult education. Important questions include (1) the future substantive scope of the Cooperative Extension Service; and (2) the nature of its methods in extending the University, which, in Michigan, incorporates 79 county extension offices.

It is recommended that the Off-Campus Programs Committee appoint a Study Commission on Cooperative Extension, including University officials, professional leaders, and representatives of supporting or cooperating organizations. Its purpose should be to advise the Off-Campus Programs Committee and other appropriate officials whether the Cooperative Extension Service can best serve the aims of the University by continuing its identification primarily with agriculture and home economics, or whether it should be rounded into the single field arm of the University. Such a thoroughgoing analysis and study should determine:

- 1. The traditional and legal impediments to a more comprehensive representation of the University by the Cooperative Extension Service.
- 2. The manner in which appropriations to agriculture and home economics may be meaningfully sustained and scrupulously managed.
- 3. The manner, if any, by which additional forms of financial support for University adult education may complement and be cooperatively related to the legal provisions of financial support to Cooperative Extension Work.
- 4. The processes required to reconcile the "free service" concept of Cooperative Extension Work and the "fee-for-service" concept of other forms of University adult education.
- 5. The extent to which each academic division of the University should possess its own off-campus resources.
- 6. The desirability and feasibility of a single residential field office of a single university.
- 7. The administrative attachments of the State Extension Director in relation to the College of Agriculture.

It is recommended that the Commission heretofore suggested also study carefully the educational substance, materials, and methods of the Cooperative Extension Service in order to determine:

- 1. The extent to which the Cooperative Extension Service is adapting to the industrial society and the commercialization of agriculture.
- 2. The relationship of Cooperative Extension Work as an institution for education, to public and private agencies which provide services.
- 3. The usefulness of the educational philosophies and methodological frameworks to the urbanizing and industrializing community.
- 4. The extent to which the Cooperative Extension Service is and should be extending the methods of rigorous inquiry to the background of farm

and family decision-making, community planning, and governmental policy-making.

It is recommended that early experimentation be carried out which will serve to bring into a single field office federation the county extension office and the regional offices of the Continuing Education Service. The Committee is sympathetic to the organizational complexities of the Cooperative Extension Service, but it strongly believes that the personnel resources of the University which are "off-campus" must be in some way related at the same physical center.

The Committee recognizes that over the history of the Cooperative Extension Service the county has been the principal local or field administrative and program unit. But today new patterns of commodity, community, and industry areas are emerging. For this, for financial, for program, and for administrative efficiency reasons, the Committee urges experimentation with new administrative units and patterns of extension personnel assignment. There is good reason in Michigan to examine the feasibility of commodity administrative districts which overlap several counties, as well as regional or metropolitan groupings of extension workers, especially in those areas in which competence could be enhanced.

The Continuing Education Service and the Off-Campus Centers and Institutes

The Continuing Education Service and the several associated institutes and centers, together with the Kellogg Center, represent one of the most extensive programs of general extension in the United States and the world. Accordingly, our orientation is one of searching for excellent new programs and experimental models in the still unexplored areas of university adult education. This search for programs should relate to:

- 1. Discovering the developmental issues of Michigan life and in the mid-continental region.
- 2. Exploring the possible models of adult education, utilizing all the available media, which appear applicable to such issues.
- 3. Establishing a forum within the University by which its resources may be relevantly deployed to resolving these issues.

4. Exploring the means by which significant elements, people, and organizations in the larger community may intellectually enrich the campus community.

The University must give leadership to financing and budgeting continuing education programs in such ways as to insure imaginative designs for adult education, although these programs may not be self-supporting. The Committee subscribes to the payment of fees in adult education programs but not to the extent that the budget structure is the determinant factor in their planning. One example is the Liberal Arts program now currently underway in the Continuing Education Service, a program we commend.

Constant and increasing thought should be given to undergirding the conference program with imaginative designs to secure greater educational results. There should be more stimulation of research throughout Michigan State University in reference to the conference program.

Throughout the University several interdisciplinary centers and institutes have emerged. Some are attached to specific departments and colleges. Others are University-wide in their administrative attachment. The Committee recognizes that various forms of interdisciplinary arrangements are necessary. However, it is believed that their planning and establishment should follow extensive consultations and clear-cut policies in order that: (1) they may be examined in relation to the aims of the University, (2) appropriate decisions may be made as to their proper administrative arrangement, and (3) their relationship to other efforts which are tangent to them may be clear and appropriate. Priority should be given to those arrangements that respect the integrity of the regular academic units colleges, divisions, and departments.

Care must be exercised that some form of coherence be accomplished between a given center or institute and the regular academic divisions of the University which are asked to nurture it. In addition, the various centers and institutes should bear some relation to each other. The Committee recommends that the appropriate officials give leadership to experimentation with various structures and processes of policy-making in order to bring about greater coherence, keeping in mind the central role of the regular academic units.

Centers and institutes independent of the regular academic units — colleges, divisions, departments — should be created only in those rare cases in which the

principal focus of the center does not logically fall in one of the regular academic units. A corporate-type board representing the faculty of the several units involved is one device for relating such a center to the regular academic units. Although some of these may be administratively independent, their aims should be related to those of the regular academic units. Joint planning of annual or particular programs by closely related centers or the regular academic units involved, and their joint execution, should be strongly encouraged.

A current strength of the University is the interest of many disciplines related to community, regional, and metropolitan development. Since this field is of growing concern in Michigan and national life, we recommend such surveys, processes, and cooperative arrangements as will identify Michigan State even more strongly with this issue. The present Institute for Community Development and Services should, in addition to its own particular contributions, continually place itself in a coordinative liaison with all such related elements throughout the University.

As the proportion and number of persons with undergraduate degrees grow, we may expect an acceleration of the trend for men and women to return to the University for no more specific purpose than to be intellectually refreshed in areas which the experiences of adulthood have illuminated as important. We recommend imaginative programs in the liberal arts tradition for mature adults who may desire an occasional systematic return to university life.

The present system of locating the Continuing Education Service personnel resources throughout the colleges and departments of the University should be continued and be considered the normal pattern. Whenever possible, the staff and administrative personnel of the Continuing Education Service should have academic appointments in the disciplines of their scholarly preparation and interest. It therefore follows that mutual consultation in recruitment and appointment be practiced.

Interuniversity Cooperation

The Committee suggests intensive study and early experimentation in interuniversity cooperation. It notes with interest the growing number of interuniversity corporations, laboratories, and other arrangements by which research programs are planned and carried out. Similar plans seem no less applicable for focusing University resources in field residential centers.

The Cooperative Extension Service and the Continning Education Service of Michigan State University should give leadership to developing one or more regional extension centers which feature interinstitutional cooperation.

Consideration should be given to locating such regional centers as adjuncts of related community colleges or regional universities. The extension of educational resources drawn from outside a region should in some fashion be joined with those developed by institutions within the region. Extensions of the outside program without regard for the indigenous programs may delay the wise organization of educational resources for continuing education, and promise also to be duplicative, costly, and unnecessarily competitive.

The Students and the University

Much attention has been given in other chapters on undergraduate and graduate education to the academic experiences of students. However, time has not permitted study of all aspects of student out-of-class life and of student personnel services. The Committee has considered, therefore, those aspects about which students and faculty expressed greatest concern.

A primary goal of the University is to provide an appropriate environment for the optimum development of the intellect. A favorable atmosphere must be created in which this basic purpose can be pursued. Quality of faculty, research, curriculum, library facilities, faculty-student relationships, physical plant and equipment, and the broad range of activities classed as student personnel services are all parts of the total milieu within which the faculty and students function. Intellectual development also involves the use of knowledge to make increasingly wiser judgments. These judgments, however, do not proceed solely out of knowledge; they are also predicated upon desirable attitudes and values which are in part learned by precept, or by mastery of knowledge and methods used in the basic disciplines. Attitudes and values are in part, too, a result of imitation, identification, and reaction to the values implicit in the operations of associates and of the immediate social milien.

Because of the complexity of the total University operation, a division of labor has caused certain of these diverse activities to be compartmentalized in separate administrative units. We must never forget that the *raison d'etre* of the several administrative organizations is to contribute to the total intellectual atmosphere of the University. It is necessary that all student experiences which are provided or controlled by the University be conducted in accord with educational goals.

We must be constantly alert to the possible outcome of this division of labor. Over time, any aspect of the University operation may appear to become less and less in tune with the main purpose of the University and less and less conversant with what the other parts of the whole are doing. In such a situation images of parts of the University are created and extended to total purposes and programs. Other operations, designed as supporting services, are perceived as fragmented activities, contributing little to the primary focus of the University community.

As in any complex problem there are many reasons behind the perceptions one aspect of the University has of another. For example, a certain tone is set by modes and methods of operation, by the personnel involved, and by the relative emphasis placed on the particular activity — be it research or instruction or student services. Coupled with this may be a lack of communication, or failure to understand the interrelationship of the parts to the whole. Everyone may be aware that a favorable environment for intellectual growth is not being achieved to the best advantage, but the diagnosis of the problem varies with the position of the person who makes it.

The entire student personnel services organization is particularly vulnerable to misunderstanding on this score. To some, admissions practices may appear to be unduly sensitive to enrollment trends. Counseling may seem more directed to vocational choice than to achievement of an education. Rules of student conduct and discipline may be viewed as savoring more of control of immature and mischievous youth than of developing mature, responsible young adults.

To complicate the University environment further, students have developed a complex extracurricular

life of their own. Onto the campus have come almost as many student-driven automobiles as students, an emphasis on a great diversity of extracurricular activities including athletics, a plethora of student organizations and social activities — each of these defensible by itself but in the aggregate providing undue competition for the student's time and attention. Gradually, faculty members come to feel that their purposes in the University have become secondary, at best. We must now clearly state what we consider to be the central goals and activities of the University and place the supporting services in proper relation to our goals.

The proper conduct of student services requires recognition that they are services to enhance the educational environment and can be effective only as they are satisfactory to and respected by both students and faculty. The proper conduct of student services further requires recognition that these services are learning experiences in their own right as well as auxiliary to classroom learning.

Improvement of Communication and Intra-University Relationships

Communication and coordination of effort should be improved throughout the University. Although this problem is by no means unique to student personnel services, the effectiveness of these services is seriously impaired if, through inadequate communication, any unit lacks the opportunity to interact with colleagnes in other units in the University, to interpret its functions, to seek and to offer helpful suggestions and constructive criticisms, and whenever appropriate, to work together to achieve some common objective. Such communication is not lacking but there is little doubt that it should be extended and improved.

The Academic Senate's Committee on Student Affairs and its subcommittees provide one means of involving representatives of the faculty in the student personnel program, assisting in the coordination of the program, and communicating the results to the entire faculty. The functions of this committee do not appear to be clearly defined. The following are suggested:

The committee should play an active and effective role in formulating policy in the area of student affairs, serve as a faculty advisory committee to the Dean of Students, and recommend areas of student affairs to be studied.

Members of the committee should employ their knowledge and understanding both of student personnel services and of their own colleges to promote closer liaison.

This committee should define clearly the functions and responsibilities of its subcommittees:

Faculty-student Motor Vehicle

International Center

Orientation Policy

Joint Subcommittee on Scholarships (The Committee on Instruction, Curriculum, and Research also has such a subcommittee. The two serve jointly).

Social Affairs

Student Conduct

Student Organizations

Student Loans

Many of the subcommittees currently have student representatives. The Committee on Student Affairs should consider the desirability of student representation on *all* these committees (except the Student Conduct Committee to which appeals on actions of the Student Judiciary may be made).

The Committee on Student Affairs and its subcommittees should meet regularly. Each committee should elect its own chairman and possibly a chairman-elect to provide continuity. The Dean of Students or his representative should serve as executive secretary of these committees.

At present, the Committee on Student Affairs has delegated authority over all student organizations, including academic interest groups and honoraries, to Student Government, and the advisor to Student Government from the Dean of Students Office is assigned the responsibility for seeing to it that each organization has a faculty adviser. The Committee should consider the advisability of the following changes:

Responsibility for academic interest organizations and honoraries should be transferred from Student Government to the office of the dean of the appropriate college. (All-University organizations, governing bodies, and honoraries would remain with Student Government.) The intent is not to deprive Student Government of responsibility but to insure the involvement of faculty and administrative staff of the colleges in this area of students' out-of-class life.

Further measures should be taken to promote greater coordination of the academic affairs of the student and his out-of-class life.

For example, administrative officials in the colleges often receive information after the fact about the suspension of a student for disciplinary reasons. Similarly, a student may be requested to withdraw from the University for academic reasons or readmitted by the office of the dean of the college without consultation with the academic adviser or resident adviser in the residence hall.

The Student Affairs Committee (in consultation with the Assistant Deans for Student Affairs in the colleges and the Office of the Dean of Students) should develop more effective methods of communication and coordination.

A representative of a student's college should be present when the Student Judiciary or the Faculty Committee on Student Conduct is acting on a case which may involve suspension or expulsion.

When decisions are being made in the colleges regarding probation, withdrawal for academic reasons, or readmissions, academic advisers and resident advisers should assist in making these decisions.

Closer working relationships and greater mutual understanding are achieved when qualified members of the staff of student personnel services devote part of their time to teaching in the academic areas. This practice, for example, has proved of mutual benefit to Counseling Center staff members and the departments of Psychology and Administrative and Educational Services, and it should be encouraged and extended. To this end, appropriate departments should be consulted when new student services personnel are hired.

Closer liaison is promoted also by making available to related departments the facilities and staff of student personnel offices for practicum experiences for graduate students and by offering assistantships to advanced graduate students. These programs should be continued and extended wherever possible.

Interested faculty members might take intensive training in counseling and serve half time as counselors in the Counseling Center for a period. (The present practice of selected academic advisers serving as counselors in the summer Counseling Clinics for new students has been of advantage both to the faculty member and his college and to the Counseling Center. Intensive training prior to and during the clinics is a part of the program for these faculty members.)

The Counseling Center should investigate methods of promoting the most effective liaison with the colleges. Consideration should be given to assigning a member of the Counseling Center on a part-time or full-time basis to each of the colleges.

The Regulation of Student Conduct

The nature and content of the rules and regulations governing student conduct together with the mode of application and enforcement must be consistent with and appropriate to a university environment. This is conceived to be one in which free inquiry and the right to dissent is zealously cherished, where the worth and integrity of the individual is safeguarded, and where the intellectual, cultural and personal growth of the student is assiduously promoted.

The University should be constantly alert to potential consequences of its quite proper desire for an orderly environment. Naturally the University is interested in individuals and groups and in safeguarding the student from the consequences of his own poor judgment. The University also desires to protect itself as an institution from the unfavorable publicity which might result from unrestrained student behavior. Yet such purposes may result in the creation of an atmosphere which is not conducive to a sense of freedom on the part of students and one in which they feel that they are not considered as mature responsible citizens. Any tendency in a large university towards a regimen of regulations and records as a means of controlling students should be resisted in favor of a program of principles of personal responsibility and integrity of the individual student and student group.

The degree of success or failure achieved by the University in balancing the need for social control with the equally demanding need for freedom from restraint is attributed by many students and faculty to the Office of the Dean of Students. This perception of the Office of the Dean of Students is related to:

- 1. The appropriateness of the content of the rules which the Office of the Dean of Students applies and implements.
- 2. The skill and finesse with which the rules and regulations are applied.
- 3. The degree of student understanding and appreciation of the rationale of the rules.

- 4. The extent to which students feel that they have had a hand in making the rules or can have a hand in modifying them.
- 5. The extent to which students and faculty perceive the primary function of the Dean of Students to be disciplinary-punitive in nature.

In order to improve the environment surrounding the regulation of student conduct and to reduce to a minimum the present or potential conflict between the need for social control and the need for freedom from restraint, the following steps should be taken:

The Committee on Student Affairs should take a more active role in the content, mode of application, and implementation of rules and regulations governing student conduct.

A student-faculty committee, named by the Committee on Student Affairs in cooperation with Student Government, should thoroughly study all rules and regulations governing student conduct, evaluate them, and make recommendations to the source from which the regulations emanated.

The Committee on Student Affairs should examine the University policy of serving *in loco parentis* for students to determine the advisability of continuing or modifying the University assumption of responsibility for student misconduct.

Spartan Round Table is an excellent device to bring students into closer contact with the affairs of the University. It should be continued and strengthened in order to enhance the environment in which free student inquiry and the right to dissent is a prime value. Similar organizations should be created in the several colleges with the dean presiding to discuss college affairs with the students identified with that college.

Residence Halls and Off-Campus Living

Residence hall programs and regulations regarding off-campus housing are directed towards providing and insuring an environment conducive to academic achievement, to good citizenship practices and personal growth, to acceptable standards of health and safety, and to congenial living environment.

Three interested groups are directly involved in the housing of students: the students, the Men's and Wom-

en's Divisions of the Office of the Dean of Students, and the University Business Office. The teaching and research faculty are also involved, since decisions about the residence halls are reflected in student morale, in student attitudes toward academic work, and in the campus atmosphere as a whole.

The actual management of the residence halls is performed by business managers responsible to the Office of the Manager of Dormitories and Food Services. The educational program in men's residence halls is conducted by an Educational Director, Resident Advisers, and student Resident Assistants responsible to the Men's Division of the Dean of Students Office. House Mothers are in residence in women's residence halls assisted by student Resident Assistants, responsible to the Women's Division of the Dean of Students Office.

The recommendations which follow are based on the premise that the entire student housing program should be brought into closer coordination with the academic program of the University to enhance its contributions to the central purpose of the University.

Sound business considerations are essential to the operation of living units, but these need not conflict with academic life. To resolve problems harmoniously, prior to arriving at policy decisions, regarding the management of dormitories which affect students, joint communication and consultation should take place among representatives of the Men's and Women's Division, Housing Assignment Office, representatives of the Faculty Committee on Student Affairs, Student Government, Women's Inter-dormitory Comcil, Men's Halls Association, and the Office of the Manager of Dormitories and Food Services.

The educational programs of the residence halls should be implemented to maintain a climate which primarily promotes academic, intellectual and cultural pursuits. Such program should encourage the development of individual and social responsibility and make possible participation in constructive social and recreational activities.

The present record system in the halls is viewed by some faculty and students as a form of pressure to participate in extracurricular activities or to meet a norm of social participation. Since such an interpretation is made, it is recommended that these records on student participation and evaluation of citizenship be discontinued in their present form and that any system of records should scrupulously avoid any such implication.

Student initiative in developing residence hall organization and rules and regulations should be encouraged. Over-organization and over-supervision by the administrative staff of the residence halls should be avoided.

Organization and Administration

General

With the recent changes in the structure of the central administration of the University, the administration of student personnel services should be more closely coordinated with the academic aims of the University.

Women presently represent one-third of the undergraduate population. Consideration should be given to representation of women at the policy-making level of the University. The Director of Education for Women, recommended earlier, should assume such responsibility and develop ways of providing effective leadership on the campus.

Financial Aids

At present four separate offices are performing functions which relate to financial aid to students: scholarships (Scholarship Office under the Director of Admissions and Scholarships); student loans (Men's Division and Women's Division under the Dean of Students); part-time student employment (Placement Office under the Dean of Students). A Student Financial Aids Office, combining these functions, should be considered.

Office of Alumni Relations and MSU Development Fund

The placement of these offices under the Dean of Students is questionable since they are concerned primarily with individuals and groups off the campus rather than providing services to students in residence.

These offices should be attached to the Office of the President.

If increasing emphasis is to be given to involving alumni in the educational program of the institution by enlisting their assistance to interest able students in attending Michigan State, by giving leadership to alumni groups in development of their programs, and by relating them more effectively to the on-campus program as they have requested, the Office of Alumni Relations might appropriately be coordinate with other offices which relate both to on-campus and offcampus activities, e.g., the Office of Community-Junior College Cooperation and the Honors College.

Office of High School Cooperation

The close relationship of this office to the Admissions Office raises a question regarding the separation of these two units. At present the Office of High School Cooperation is under the Dean of Students; the Admissions Office under the Dean of University Services. Consideration should be given to placing them within one administrative unit, for example, under the Director of Admissions. Another type of organizational pattern might classify them as student services. Still another might place all agencies which deal with prospective students and former students in one administrative unit; e.g., Office of Community-Junior College Cooperation, Office of High School Cooperation, Alumni Relations.

The Placement Office

The question of the location of the University Placement Office under the Dean of Students raises an even larger question of the relative advantages and disadvantages of centralized or decentralized placement. The Committee did not explore this question and wishes to record only some observations. At present, adequate physical facilities, filing space, interview rooms and waiting rooms are provided in the Student Services building. Any decision to decentralize the operation would have to consider both space and the relative cost factors of staffing several smaller placement offices.

Liaison between the Placement Office and the several colleges, given the present centralization of placement services, should be further enhanced by the creation of a standing all-University faculty committee on Placement Policies and Operation.

With respect to teacher placement and its appropriate location, close liaison with all colleges who train teacher candidates is essential. Any decision made on the location of this enterprise should take into account the continued maintenance of a close relationship between subject-matter departments and professional education departments in viewing the job of placing teacher candidates as a joint responsibility.

The Faculty and the University

Morale refers to a pervasive mood or spirit which is conducive to dependable performance and which arises out of faith in a program and confidence in leadership. In a democratic society, and particularly among the more intelligent members of such a society, participation in determination of goals and the program designed to reach those goals is essential to high morale.

The open hearings sponsored by the Committee on the Future of the University provided some insight into the role desired by the faculty in policy-making, as well as some indication of faculty morale. Communications from individuals and a round of meetings with the College Committees on the Future of the University provided additional sources of information. Beyond this, the members of the Committee have extensively discussed the problems and have, from their own experience, observation, and conversations with others, added, organized, and attempted to interpret some of the issues and factors involved in this critical area.

The current financial predicament in Michigan and the inability thus far to develop a statesmanlike solution to that difficulty create an atmosphere of uncertainty which is highly destructive to morale. However, there are numerous other factors involved. Some are misunderstandings arising out of simple failures in communication; others reflect problems in defining the most desirable role for the faculty in the making of decisions about major University policies.

Salaries

Everyone is aware of the obvious salary disadvantage of the Michigan State University faculty in comparison with faculty members in similar institutions and of the positive necessity of doing something about this situation at an early date. There is also some feeling that the cost of living in the Lansing area is relatively higher than in many other centers and that this has never been adequately recognized in thinking about salary matters. Among some of the professional schools there is a feeling that the disparity between the salaries of teaching personnel and of practitioners in the field is even more marked than that between the salaries of faculty here and faculties elsewhere. The extent to which it is possible to adjust salaries to compensate for this situation presents some difficulties, but it is at least incumbent upon everyone concerned to recognize the issue and clarify a policy. There is a general need to bring faculty salaries up to a level comparable to those received by similarly trained professional people in the nonacademic world.

There is also some feeling that the policies regarding augmentation of salary through off-campus consultation are not uniformly applied and may be too restrictive in some circumstances.

Some persons believe that there may be a prejudice against women staff members which results in a significantly lower salary for women than for men at each of the various ranks. Another expressed concern is that too frequently offers from other universities are sought and accepted as a basis for salary increases.

Although the need for improved salary levels is almost too obvious to mention, we recommend that continuing attention be given this problem. The University should review and remedy possible inequities in salaries between men and women and between tenmonth and twelve-month appointees, particularly at the ranks of associate and full professor. The University should also clarify existing policies to create greater uniformity in practice concerning the augmentation of salaries through off-campus consultation.

A Coherent System of Rewards

A recurring concern of the faculty is some uncertainty about what is and what is not important in the University. Our professors, involved in a multiplicity of activities, are pressed from many sides to give time to additional matters. Teaching, research, conference participation, consultation, speech-making, developing and participating in radio and television programs, advising and enrolling, committee work, and travelall these appear to be viewed as legitimate academic activities, but there is doubt as to their order of priority in demands on faculty time.

In part because of the many academic activities considered legitimate, the basis for promotion and for salary increase is not generally understood by the faculty. Some believe that the most noticeable basis for reward is publication. If this is true, the person who tries to fill the many demands made by his conscience and his administrative superiors by decreasing the number of his new publications condemns himself to low rewards. Although statements are regularly made about the importance of teaching, no systematic procedure for evaluation of instruction is used. Advising and registration, as operated in some colleges, are largely clerical operations. Presumably these are vital functions, but in some academic units there are individuals who decline to expend their time in such activities and yet seem to be rewarded as much and perhaps even to a greater extent than others who perform these functions.

Others believe that those who engage in off-campus education or administrative activities receive prefer-

ential treatment in promotion and salary increases. They feel that too few scholars who spend long evening and weekend hours in research and writing activities are properly rewarded.

Part of the difficulty lies in the lack of well-defined and understood standards for promotion and salary increases covering the several types of academic activities. The present promotion form illustrates this fact. To meet this situation, improved principles should be developed for evaluating the productivity of each faculty member. These principles should make it clear that no one person is required to become involved in every activity. Rather, individuals should be urged to seek out those phases of scholarly activity which they do best and from which they receive the most satisfaction, with full confidence that excellence in one or two fields of endeavor will be rewarded. Department heads should bear the major responsibility for the necessary consultation for the achievement of this end and for the evaluation of the results. The basic or ideal model which should be encouraged is the teacherscholar.

Each department head, with the assistance of the departmental advisory committee, should give continuous attention to maintaining an equitable distribution of the department's resources appropriate to its multiple functions. Evaluation forms for promotion should be recast, with attention given to the major duties of the faculty reference to the over-all aims of the University. Salary rewards should be scheduled so that scholarly pursuits and achievement are not sacrificed to other types of academic duties.

Academic rank, if it is to have any meaning, should be conferred only upon those who engage in instruction or research in one of the units of the University devoted to these purposes.

Faculty Organization and Participation

One of the most important dimensions of morale must be a pervasive confidence that administrative officers desire to consult with faculty on matters which deeply concern them or in which they possess expert knowledge of importance in solving a problem. The development of such confidence on the part of the faculty is essential in building a promising future.

This involves confronting and solving a number of problems.

In the first place, if the faculty is to participate effectively in solving problems, better channels of *communication* must be developed and used to enable the faculty to learn what problems are confronting the University, their colleagues, or the administration. Too often faculty members are in the position of finding out, after a decision has been made, that the problem existed. This becomes especially wasteful and discouraging when individuals, having particular interests and experiences in problem areas in which decisions are being made, do not find their competence being called upon. More effective involvement of the faculty in problems that confront the University can be one of our great resources in the future.

In the second place, if the faculty is to participate effectively in solving problems, there must be an atmosphere that suggests that those in administrative positions are deeply and genuinely concerned about faculty judgments. Such an atmosphere requires that faculty feel confident that their advice is really wanted and that questions they raise will be welcomed; it cannot exist when faculty believe that those in administrative positions are primarily concerned with the opinions of those above them in the hierarchy or with external opinions. This atmosphere is especially crucial in making administrative appointments, where seemingly arbitrary appointments must be guarded against and faculty consultation sought. We must find better ways of involving faculty prior to the point of reaching decisions. We must also find ways of insuring, when injudicious or bad decisions are made, as they inevitably will be from time to time, that reconsideration and revision are provided for.

In the third place, it is necessary that an organizational structure be developed which provides more effective participation by the faculty in those areas directly affecting the academic and educational policies of the University. There is question as to whether the composition of the Senate, the Academic Council, and the Standing Committees (and the electoral methods employed) have assured the best faculty judgment on matters of policy. The Academic Council is an area of particular concern. But important as organizational structure is, it must be recognized that unless those in administrative positions indicate a continuous desire for and willingness to be guided by faculty views, reshuffling of organizational patterns

can do little to create an environment conducive to high morale and great achievements.

We recommend that discussion and debate be explicitly recognized as prerequisites for the shaping of policy and the making of decisions about educational aims and procedures. To secure the continuity of such processes at all levels of the University, it is recommended that each department elect an advisory committee to work with the department head on all major policy matters. Each college should also have an advisory committee elected by departments, groups of related departments, or by other means satisfactory to the college faculty involved. Divisions or schools in colleges may also find it desirable to arrange for such advisory committees. These advisory committees would consider the matters brought before them by the department head, director or dean, as well as other matters proposed on their own initiative or on request from individual faculty members.

The function of advisory committees is to enable the administrative officer of a department or college to make policy decisions with the help of the widest range of faculty knowledge and competency. Committee members should express themselves with complete freedom and forthrightness. It should be the special function of the administrative officer to listen carefully, encourage freedom of expression, and finally to distill out of the discussion what appear to be the wisest and most effective policies for the educational unit involved. Obviously the final responsibility and therefore the authority rest with the administrator, but in the interests of good morale and good communications with his faculty, the administrator should clarify to his faculty the reasons for his decisions and actions.

The existence of faculty advisory committees is no substitute for capable department heads and deans who must continue to have authority commensurate with their responsibilities.

Although the choice of administrative personnel should be made only after full consultation with those affected, circumstances may change or unwise choices may be made. It is necessary, therefore, to have procedures for change or for the resolution of difficulties.

We recommend that the present system of indefinite appointment of department heads, division directors, and deans by the Board of Trustees be changed to term appointments of five years. At the end of each term, the next higher administrative official should consult with the affected administrative unit regarding reappointment of the incumbent administrator or appointment of a new person. There should be no limit, other than retirement, on the number of terms an individual may be reappointed.

In any department in which a dean is aware of a deep-seated difference of opinion between the faculty and department head, or between groups of the faculty concerning the best policy for operation of a department, a committee of peers from other departments of the University, or if need be, from other universities, should be consulted for methods of resolving the difficulty.

The Academic Council should be reconstituted to include as voting members two faculty members elected from each college, six faculty members elected by the Senate from its own membership constituting the Steering Committee of the Senate, the President, the Provost, the Vice President for Research Development, and the deans of the colleges and of the School for Advanced Graduate Studies. Other vice presidents, deans of noninstructional units, and any other officials designated by the President as of equivalent rank should be granted a participating membership without voting privileges.

The responsibility for conducting the election of college representatives to the Academic Council should be vested in each college advisory committee. It is suggested that a ballot be made up of a nomination by each department. Only members of the Senate should be eligible for election. As a means of improving communication, there may be merit in having as one of the college representatives a member of the college advisory committee, elected by the membership of that committee.

The President of the University (or in his absence, the Provost) should preside at all meetings of the Academic Council. It should become a policy in the deliberations of the Council that between the initial discussion and final disposition of any issue there be sufficient time to permit college representatives to sample the views of their constituency. This might be accomplished, for example, by a three-stage procedure of deliberation on all issues, involving first a presentation, second a consideration of principles, and third a discussion of detail.

The Steering Committee of the Academic Senate should assist the President in preparation of the

agenda for the Academic Council and for the Academic Senate. The President (or in his absence, the Provost) should preside at Senate meetings.

The structure of Standing Committees should be reviewed by the Academic Conneil, with the purpose of recommending to the President which of these committees should report to the Council rather than directly to the President. All committees reporting to the Council should be reconstituted to have a faculty member as chairman.

In summary, the Committee is convinced that the basic problem in developing high faculty morale lies in creating a climate wherein the artificial distinction between faculty and administration is replaced by acceptance of the necessity and wisdom of some differentiation but not complete separation in function and in responsibility. Such acceptance can result only if assurance is provided in words, in decisions, and in the process of reaching those decisions that the faculty has a respected role in the University, not only as teachers and researchers, but as intelligent individuals having points of view about what higher education should be, and about how universities ought to be run to achieve the best possible educational program. This is not the accomplishment of a month or even a year, but rather involves the development of a tradition.

Responsibilities of the Faculty

The effectiveness of the previously described recommendations for faculty organization and participation in achieving a great university will be reflected in the willingness of the faculty to accept their rights and obligations with a sense of responsibility. Participation in policy discussions is primarily a means to an end and not an end in itself. Such participation, it must be assumed, can best come from a faculty which makes a conscientions effort to be informed on problems of importance to the University and which is willing to contribute time and thought to their solution.

More specifically, the faculty must actively involve itself in intelligent participation in implementing programs which are selective and distinctive. It must concern itself continuously with the responsibility for exploring experimental approaches to both new and established aspects of knowledge. Furthermore, it must assume even more responsibility than in the past for improving the quality of staff attracted to and retained at the University.

As individuals and as members of the University, we must be ever mindful that our greatest privileges go hand-in-hand with our greatest responsibilities.

Creating a Scholarly Climate

Michigan State University should continue to attract a faculty characterized by its desire to operate within a genuine scholarly climate. This requires that we give our most serious attention to encouraging such a climate on this campus. It is a matter of deep concern to both faculty and students that many qualities of the type of scholarly climate associated with great universities are not sufficiently evident on our campus. Faculty members feel that they are called upon to devote too heavy a portion of their time to various service and clerical functions which bear little relation to scholarly pursuits. Similarly, the Student Opinion Questionnaire indicates that students feel that achievement in academic areas is overshadowed by too much attention to extracurricular activities and athletic prestige. Whether or not these impressions are justified, they must be changed in the years ahead.

Preceding sections of this report have dealt extensively with the factors involved in improving the scholarly climate on our campus. In general, these factors involve recognition and reward for scholarly achievement and greater emphasis upon the library and other scholarly facilities. We recommend that salary levels be so adjusted as not to place a premium upon administrative appointment to gain increased remuneration and status.

Administrative officials, especially at the departmental and college levels, should be encouraged to engage in some scholarly pursuits, and their duties should be adjusted to permit some study and research each year. Even minimum participation in such pursuits should facilitate the movement of academic persons into and from administrative duties and should enable the administrator to view the University from the vantage point of the academician.

Present policies in encouraging faculty attendance and participation at professional meetings, by part payment of expenses, should be continued. However, these policies should be more widely interpreted to the faculty, and the Provost should occasionally check the procedures of the several colleges to insure reasonably uniform practices. Variations in the amount and variety of funds available as well as differences in departmental policy presently result in marked disparity in support of attendance of faculty members from different departments at the same meetings.

Physical Facilities and Other Resources

The faculty appreciates the fact that budget limitations on capital expenditures have been the cause of discontinuance and delay in the planning of needed new facilities. Although there has been consultation with the administrative personnel in colleges and departments in the planning of facilities, there is, in the view of many faculty members, a lack of consultation with them about their needs when allocation of existing space is made or when expansion of facilities is contemplated. The inevitable delay between initial planning and actual construction of a building is sometimes accompanied by such extensive changes in needs and personnel that individuals may be uninformed as to the status of developments.

Fuller communication at all stages of development in the planning and construction of physical facilities would help to relieve this misunderstanding.

Many faculty members, especially those in the science field, expressed an urgent need for an instrumentation shop. Occasional use is made of the Buildings and Utilities Department, with complaints about charges and difficulties of getting special work scheduled as needed.

Most of the college committees commented on the crucial need for providing more clerical, technical, and unskilled assistance for faculty so that faculty time could be better utilized to serve the functions of teaching and research.

There also appears to be a problem in upgrading competent technicians and other workers who have received on-the-job training at the University which makes them valuable beyond the allowance made by the Personnel Department for reclassification. Present personnel procedures sometimes result in losing these excellent people to business operations outside the University, or to "pirating" within the University itself.

Numerous comments were made by responsible professors about unnecessary delays in getting extensive lists of approval signatures, and substitutions of requested materials. Although the faculty can understand the purpose of the Purchasing Department in comparing prices for the sake of economy, reports indicate many instances in which precise specifications are not followed and unsatisfactory substitutes are obtained, which result in the necessity of return and further delay. Although such comments might appear to be minor, they occurred too frequently to be ignored.

An up-to-date inventory of research equipment in various departments should be developed and maintained. This complete inventory file, if made available to faculty, should tend to minimize expenditures for duplicate equipment not needed for continuous use. A method of compiling this information (more extensive and explicit than that compiled by the Graduate School recently) should be developed and provision made for using it for continuous reference. This could be done in cooperation with the Inventory Department and put on IBM cards to expedite location of equipment. Such a file could also be used by the Purchasing Department to prevent needless duplication.

All levels and units of the University should review complaints about the inadequacy of office and laboratory space in old and particularly in the temporary campus buildings. The situation appears to be so critical in some areas that an immediate reassessment of available space and adjustments should be made.

In addition, careful attention should be given to planning not only for adequacy of space for housing present and future staff in new buildings but also for the provision of some reasonable measure of privacy for offices. This is essential for productive faculty activity and for private faculty-student conferences. The ideal practice for future planning should be private offices for faculty.

Space should be allocated in individual buildings where faculty may gather for informal discussion. Where such facilities are already available, they are extensively used and greatly appreciated. Providing this facility in buildings where it does not now exist should be given high priority.

The strong interest of many faculty members in faculty club facilities should be brought to the attention of the Board of Trustees so that some consideration of this need may be included in long-term planning.

Communication as a Morale Factor

In addition to previous comments about decisionmaking in which the need for good two-way communication between the administration and faculty was emphasized, reference should also be made to another facet of the same problem. The need for attention to dissemination of information became evident from the kinds of questions submitted by the faculty. Examples of questions: (1) Do my years on temporary appointment count toward eligibility for a Sabbatical? (2) Why am I not eligible for TIAA until 1961? (3) Who is liable for the injury of an employee on the job? (4) How are voting privileges for faculty determined? (5) Who determines student admissions policies and what are they? (6) Is there a policy on handling copyrights and patents? (7) How do you go about getting research funds?

Much information, essential to a feeling of job security for faculty and staff, is available at present. It is, however, scattered so widely that a new faculty member (and frequently the established member, as well) may be unaware of its existence or unable to find the source.

Although ordinary day-to-day questions may seem to have no great significance for morale, business and industry have long recognized that well-informed personnel are more secure, stable, and productive than personnel left to speculate about answers to questions. Educational institutions frequently overlook this important consideration and fail, therefore, to provide adequate orientation for new faculty and pertinent, current information of concern to all faculty.

We recommend, therefore, that several sessions for orientation of new faculty members be provided each year. We further recommend that the faculty handbook be revised and expanded to give explanations of important areas of concern and to cite sources from which more detailed information may be obtained. A suggested list of topics for treatment in such a handbook follows:

- 1. Brief history and philosophy of the University.
- 2. Description of organizational structure, including pertinent facts about the Assembly, Senate, Council, and standing committees.
- 3. Promotion procedures.
- 4. Fringe benefits, retirement, TIAA, tenure, sabbatical leaves, consultation privileges, insurance, Social Security, taxes, etc.
- 5. Registration, student-faculty relations, commencement participation, etc.
- 6. Travel.
- 7. Purchasing.
- 8. Faculty responsibility for public relations.
- 9. Parking regulations.
- 10. Identification cards.
- 11. Campus faculty housing.
- 12. Health services and hospital.
- 13. Emergencies.

- 14. Recreation.
- 15. Lecture-concert-travel series.
- 16. Sports facilities for faculty families.
- 17. Athletic program.
- 18. Kresge Art Center.
- 19. Faculty-student musical programs.
- 20. Plays, etc.
- 21. Cooperative nursery school.
- 22. Buildings and Utilities.
- 23. Central stenographic services.
- 24. Publication sources.
- 25. Professional and honorary organizations.
- 26. Faculty Achievement Day.
- 27. Faculty club.
- 28. Auditing of courses by faculty and staff without charge.
- 29. Employees' Credit Union.
- 30. List of sources for obtaining general information.
- 31. Services available to students.
- 32. Library: ordering books, placing materials on reserve, lending regulations.

Interpreting the University to Its Publics

Regardless of the success of the University in the years ahead, it will not achieve the role we envision if its mission and functions are not adequately and accurately interpreted. Glamorous publicity cannot sustain an image of the University better than it actually is. An inopportune or distorted interpretation can prevent the full achievement of its goals.

A university (like a corporation or an individual) is many things to many people. To some, a university is a football team. To others, it is a source for farm practice information. Others see it as a collection of buildings and teachers where students are subjected to a four-year cafeteria of accumulated facts. To others again, it is a moderately inexpensive country club. And to some few, it represents the best of all possible worlds and all we need to do is to cultivate our gardens.

We have been told that the University speaks with many voices. This is true. One of the reasons why it is true is that, because of the rapid growth of the University, each of us tends to see and to be concerned solely with his own area. There appears to be, at the moment, no single image of the total University, and no immediate clear-cut way of informing ourselves about such an image.

At any given time, *the image* of the University is the sum total of the impressions about the University existing in the minds of people who constitute its publics, or audiences. These audiences include:

- 1. The faculty.
- 2. Faculty members at other institutions (some of whom we may want to hire someday).

- 3. The student body.
- 4. Prospective students at various levels: high school, junior and community college, and potential graduate students.
- 5. Parents.
- 6. The state legislature.
- 7. Government administrators at home and abroad.
- 8. Occupational groups, in-state and out-of-state, such as farmers, business and industrial management, organized labor.
- Financiers, philanthropists, and foundations who may be asked to support the University's programs.
- 10. "Influence groups" who affect the way in which the image of the University is perceived by people other than themselves—for example high school principals and guidance people, junior college administrators and counselors, and the so-called standard "influence groups"—the clergy, bankers, lawyers, doctors and other professional people—whose opinions carry extra weight in our kind of society because of their professional status.
- H. Alumni.
- 12. Sports fans.
- 13. Suppliers to the University—both those who sell to the University directly and those who depend on the University community for the support of their private businesses.

- 14. Prospective employers for our graduates.
- 15. Our immediate neighbors—people not connected with the University who live in the community and are affected by what the University is and does.
- 16. The great mass of people who view the University in different ways under different circumstances—as supporters of the Jeffersonian ideal of education at one moment and as bearers of the tax burden at the next moment.

The purpose of a public relations program is to interpret, relate, enhance, and advance the total image of the University among its various audiences in accordance with a predetermined plan. (Public relations people, in spite of what we may read in certain books and magazines, do not create *images*. They do engage in a number of techniques and skills designed to further the development of the desired image in the minds of the various audiences.)

One of the major reasons for the existence of the Committee on the Future is a realization that the past image of the University is no longer valid to many of its audiences, that its present image is amorphous and diffuse to other groups, and that there is a need at this time to deterimne what the future image of the University is to be.

Information regarding the University emanates from many sources within the University. At present, there appears to be no policy to guide most of these sources. As a result, many of the distinguished achievements of the faculty receive little or no attention, while more spectacular and superficial events color the image presented by the University to its many publics.

It is fully apparent that in the future of Michigan State there will be a greater emphasis on academic affairs, research in specific areas, exploratory work in many fields. There will probably be a lessening emphasis on athletics, purely social activities of student life, and the "how to do it" aspects of home economics and farm practices. More attention will be given to the development of the intellectual and cultural climate of the campus.

Public Relations Responsibilities

Once the image is arrived at, it is the responsibility of those charged with a public relations function to make the image meaningful to the audiences of the University. Each one of us—faculty, staff, or student—has some public relations function, whether or not we are specifically charged with one. We speak with many voices and will continue to do so, but it is extremely important that we all sing out of the same hymn book.

The faculty in its role as an "audience" must be kept informed about details of the total ongoing program of the University, about the research activities of colleagues in other departments, about the growth of library holdings to support the areas chosen for distinctive emphasis. The faculty member who delivers a commencement address at a Michigan high school must realize that he speaks for the University-in his appearance and his manner as well as in the content of his address. Four staff members making high school "visitations" must all be able to provide accurate information. The words we write, the booklets and catalogs we print, the letters we mail, even the way we answer the telephone are all public relations instruments. All these are part of the total image of the University. All these stem from the University's public relations policy.

The University will continue to have many publics with special interests and demands. Its programs will continue to be diverse and to serve a multiplicity of needs. Each of these publics must receive a total image of what the University stands for, a true reflection of the major purpose and emphasis of the institution. Uniform policies must be established to control the information emanating directly from the University.

In order to achieve a coordinated policy consistent with the major goals of the University, a special faculty committee, appointed by and answering to the President as the chief public relations officer of the University, should assist in the development of public relations policy. Its membership should consist of teaching, research, and off-campus program faculty. The Director of University Relations should serve as its Executive Secretary.

The responsibilities of this committee should include:

1. Assisting in the ongoing formation of the University image in the light of changing times and circumstances. As areas of distinctive emphasis are selected and developed, the public relations activity of the University should be channeled to give the widest possible communication about these areas and their relations to the total image of the University to each of its many audiences.

- 2. Assisting in the development of procedures to carry out the public relations activity of the University. For example, the development of a "beat system"-reporters from the News Bureau of Information Services assigned to specific and regular coverage of the various colleges, departments, and research activities-is essential to insure the greater participation of all departments in the publicity given University activities. A standard procedure-or "de-briefing system"-to interview all University personnel returning from abroad and from major state and national assignments is needed to make this kind of experience more useful in the public relations effort. A central office in which all information about the University can be collected is necessary if a total image of the University is to be projected. These and other procedures might properly be the concern of this committee.
- 3. Providing continuous faculty representation in matters of public relations for those activities not now administratively related to the Director of University Relations. The absence of a University public relations policy hampers a number of activities whose operations have an essential public relations nature—the Office of Alumni Relations, the Office of High School Cooperation, and individuals and offices concerned with the admission of students, to name only a few. A strong public relations policy, backed by a strong faculty committee to implement it and interpret it as an advisory body to all groups involved in public relations, is of major importance in strengthening the work of these activities.
- 4. Providing continuous faculty evaluation of the public relations output of the University in terms of the coverage and emphasis devoted to various University activities, their relationships to each other, and to the interpretation of the University image as a whole. Every public relations program needs periodic assessment of how well it is meeting the objectives set for it, which specific objectives have been accomplished, and what new objectives need to be established.

- At different times, different University programs and areas of emphasis will require and deserve more attention and publicity than other programs and areas. This committee can be of great service in helping to allocate the public relations resources of the University in advancing the total image.
- 5. Providing continuous faculty evaluation of the way in which the image of the University is being received by its various publics, with a view to strengthening the total image. The most important element in the communications process is the person who receives the communication. The success of the total program stands or falls on the way in which the University is perceived by its audiences.

As a part of this program, the Office of Alumni Relations should be attached to the Office of the President and its activities reoriented to develop the relationships with the alumni to their fullest potential. The alumni of the University should understand better than any other group in the state the major purposes, programs, and needs of the University. Alumni can do more than contribute to fund drives and promote athletic activities. The alumni who met with us and who have since written us in detail indicate that too little effort is currently being made to use them in effectively improving the University's total program. Certainly, such an important public needs greater attention.

The interpretation of the University to its students and faculty, as mentioned earlier, has been less successful than conditions have warranted in the recent past, even though the times have been difficult. Therefore, we have given much consideration to improving and increasing interaction between the faculty and the administrative officials in the future. More effort on the part of the administration is needed in sharing with the faculty the problems of the administrator and the reasons for his actions and decisions. While this may reduce the pace at which certain decisions can be reached, the positive stimulus of such procedure will far outweigh any loss of time in arriving at decisions.

Organizing and Planning for Future Growth

The general objectives of the University and its implementing programs cannot be achieved unless the resources of the institution are allocated in an appropriate fashion. Since resources are never unlimited, it is imperative that the resources available to us be used to maximize the effectiveness of programs selected for emphasis.

At present, it is doubtful whether the greatest possible value is being achieved from the resources available to the University. There are two significant needs not yet met. These are (1) relevant criteria generally understood and applied to determine whether a specified program is central, peripheral, or in some cases detrimental to the major purposes of the University, and (2) a flow of information (designed to facilitate the assessment of programs in terms of these criteria) to the points of decision-making within the University.

All-University Criteria

Instructional and program units are best fitted to formulate and develop meaningful programs for their areas. Many specific suggestions for evaluating the instructional, research, and off-campus programs of the University have been covered in applicable sections of this report. In addition the Committee has formulated criteria that would appear desirable at the all-University level. They are:

 Appropriateness of the program to the central objectives and purpose of the University. Does the program deal with material which is con-

- ducive to sound research, advanced studies, and founded upon areas of fundamental knowledge?
- 2. Importance and cogency of needs for the program in the state or nation. Does the program deal with problems of major significance to the people of the state and nation or needs not seen but likely to arise?
- 3. Comparative advantages or strengths of the University in the program area. Does it build upon existing faculty competence, experience, or facilities? If not, will it complement them?
- 4. Demonstrable continuity in program development. Have the long-range developmental implications for the University's program been clearly examined?

These criteria should not be used to avoid experimentation in imaginative programs not now visualized. Care should be exercised, however, to insure that the inauguration of such programs does not result in a dispersal of already scarce resources. Therefore, in the acceptance of special projects or earmarked funds, it is suggested that the program should:

- 1. Initiate research and contain adequate allocation for research purposes.
- 2. Involve personnel capable of assimilation into the University faculty at that time when it is appropriate for the program to phase out.
- 3. Be of interest to and enhance the development of present faculty who are to be involved in the program.

- 4. Provide adequate overhead coverage so that additional general fund outlays are not required.
- 5. Be in areas in which Michigan State has comparative advantage for developing an excellent program.
- 6. Entail distinctive approaches proceeding from fundamental theory.
- 7. Be concerned with problems of urgency and importance to the various publics of the University, or be designed to help these publics become aware of urgent problems confronting them.
- 8. Draw upon the strengths of existing upper divisions and graduate schools.

Resources which are of great significance to a university's program are faculty, administrators, students, and plant and facilities; and their allocation is of prime importance. Because these are somewhat different problems, each is treated separately.

The Mobilization of Faculty Resources

Clearly one of our most valuable resources is the time of the faculty. One of the most wasteful drains upon faculty time is the proliferation of courses and sections of courses. Despite recent attempts to reduce numbers and prevent expansion, the number of course offerings in our catalog exceeds 3,300, and there are multiple sections of many of these.

There appear to be several reasons for this development. First, positions appear to have been established in anticipation of increases in enrollment, rather than upon departmental and college plans for desirable program content. Second, some departments and colleges rigidly adhere to certain class and section sizes. No evidence before us suggests that these sizes in any way maximize the effectiveness of the educational program.

Since statistics have not been readily available, it is doubtful if either the faculty or administration recognizes the costs of courses and section proliferation in terms of faculty salary levels, time that could be used for research, and time that could be used for improved student advising and course preparation. Neither have the large disparities in practices between different units of the institution been readily discernible. (For examples, see Annexes VII and VIII.) Better collec-

tion and flow of information on such matters is, therefore, highly important.

At present, there is little incentive for an individual department or college to reverse this trend, since the affected unit does not benefit directly from the savings achieved and in fact may lose status relative to other units. In order to move toward a more efficient allocation of faculty resources, several recommendations are made:

First, all courses falling below minimum enrollment figures should be reviewed, dropped, or offered only in alternate years.

Both the colleges and the Course and Curriculum Committee of the University should be charged with reviewing courses in terms of enrollments. Any undergraduate course falling below twenty-five enrollments for two consecutive offerings, and any graduate course falling below an enrollment of five in two consecutive offerings should be reviewed with the presumption the course will be dropped or offered on a less frequent schedule. These provisions need not be applied to new courses during their first three years.

Second, more flexibility and imagination should be applied in determining optimum class size. There are some courses in the University in which class size should be substantially increased, given the appropriate assistance for the instructor. In other instances, class size should be reduced for maximum effectiveness.

Each administrative unit should develop an appropriate instructional model for large lecture, lecture-discussion, and seminar-tutorial courses for that administrative unit. Such models should be used as norms in assessing instructional effectiveness and efficiency and in moving programs toward their established goal. The University should operate on the principle that there is no single optimum class size, but that diversification in terms of a considered model is the appropriate way to achieve instructional efficiency.

Each administrative unit should define the central core of its program and reduce extreme specialization at the undergraduate level, leaving such specialization for its more appropriate place at the graduate level.

Third, in many departments in the University, the addition of teaching fellows could result in freeing senior faculty from many details necessary to, but not part of, actual classroom contact. In some cases, such persons would also be capable of teaching parts or all of some courses; in addition to saving senior faculty

time for other scholarly work, such teaching fellows would gain valuable experience which would improve their later performance in the teaching profession.

Thus, high priority should be given to allocating graduate assistants and teaching fellows to assist senior faculty members teaching lecture sections to underclass students and to the establishment of a sound teaching fellow program within the University.

In order to insure that such changes do not reduce the effectiveness of departmental and college programs, these reviews and changes should be initiated at the unit level. However, in view of the widespread differences now existing, it will be necessary to establish some uniformity at the college and University level, and each program should be reviewed at that level. Wide differentials have grown up in the allocation of funds to instructional units. In the future such differentials should be justified by:

- 1. The appropriateness of the programs to the criteria established earlier in the report.
- 2. Some reference to University-wide norms such as average unit costs and student-teacher ratios.
- 3. Special characteristics of the programs such as needs for laboratories, etc.

There should be increased flexibility in the budget allocations to colleges and departments. It would appear that the present system of budget positions will impede such flexibility and, therefore, consideration should be given to its replacement by a system by which allocations for personnel are made on the basis of dollars rather than positions. Moreover, to achieve the most effective programs at the department and college levels the maximum flexibility possible (consistent with responsible fiscal management for the total University) should be maintained between the major budget categories at the college and department level. A single budgetary approval should cover all categories of the budget request.

To give incentive for a widespread evaluation within each college and department, these units should be allowed to retain the major benefits of the efficiencies they achieve for research use, purchase of supplies and equipment, or additional personnel to facilitate program objectives. Where consolidation of course offerings and other efficiencies can be achieved within the departmental or college budget without impairing program content, the unit should be allowed to carry over all or a major portion of such savings into the next fiscal year for use in appropriate programs. Since

colleges and departments have responsibility for programs, it is only consistent that they also be given the budget authority within broad latitudes to implement their programs and then be held accountable for their program performance over a period of time.

In other words, the faculty at the department and college level rightfully claims the responsibility for the educational content of the University programs, and it therefore should also assume the responsibility for the prevention of unwarranted proliferation of courses and sections which constitute a heavy drain upon available resources and prevent their use in other essential scholarly activity.

Another significant improvement could be made in the utilization of faculty time by the increased provision of clerical and technical assistance to faculty members in some departments. A careful analysis should be made throughout the University of relative clerical assistance to persons in academic positions in various academic units, of possible discrepancies between assignments of clerical assistance to persons in academic positions as contrasted to business and personnel positions within the University, of clear discrepancies between academic personnel and external governmental and professional personnel. Academic personnel should receive at least equal consideration in the allocation of clerical assistance. Provision of adequate clerical help for current scholar-teachers should be made prior to hiring additional faculty where this appears warranted. Special consideration should be given to the quality and compensation of secretarial personnel, especially with a view to acquiring more top-level executive secretaries.

Universities generally suffer from the attrition of outstanding instructional talent as faculty move into administrative positions. Department heads, deans, and other administrative officials should maintain regular contact with teaching. Sufficient allocation of help to handle detail should be made to enable such persons to carry on instruction.

The Mobilization of Student Resources

Another important resource is our students. Central to the problem is the ability of the University to attract the most capable students both at the undergraduate and at the graduate level. Beyond that is the provision of an atmosphere at the University

which will stimulate all students, regardless of their capabilities, to achieve the utmost from thir university experience.

In order that the potential student's picture of the University be attractive and consistent with the true image, those officers dealing with potential students should operate as a staff adjunct or in close coordination with the Provost, the University's chief academic officer. This, together with an improved information policy, could do much to convince the potential student that the University offers a variety of challenging programs that will enable him to be an effective member of society.

If the University is to achieve the role cast for it, there must be a significant increase in the quantity and quality of graduate students attracted to most departments on the campus. To this end, the functions of the Office of Community-Junior College Cooperation, or the Office of the Dean of the School for Advanced Graduate Studies, should be extended to include cooperation with the four-year colleges of the state. Particular attention should be given to attracting outstanding graduates from such colleges for the graduate programs at Michigan State.

Special attention should be given to the academic orientation of the student when he arrives on the campus.

One of the basic tenets of the University's philosophy has been to make available educational opportunities to capable students who otherwise would lack the financial resources for a university education. This has required the allocation of general funds to student scholarships, in addition to the special scholarship funds available. It is recommended that this scholarship program be continued and strengthened in the future to insure that the nation does not lose the potential contribution of some of its citizens because they happen to lack the family financial resources necessary for a university education. Moreover, as non-tuition costs continue to rise, consideration should be given to the establishment of at least partial maintenance scholarships for those able students who clearly demonstrate need.

Further, significant steps should be taken to bring our graduate scholarship fund in line with those of other major universities. In particular, the Dean of the School for Advanced Graduate Studies should take the leadership in the development of a University fellowship program carrying significant stipends. Moreover, the present system of graduate assistantships and fellowships should be modified to include four-quarter participation for those students who might prefer four quarters of work to three. In addition, a wide range of flexibility should be introduced into the assistantship and fellowship stipends, to be used at the discretion of the awarding department, so that the University will be better able to attract and retain the highest quality graduate students.

Many students at all levels would prefer, if possible, to continue their education through the summer months. This is particularly true of many married students whose mobility and summer employment opportunities are restricted to the immediate area. Therefore, the recently instituted full-quarter summer program should be continued and strengthened, particularly at the graduate level. This policy would also make greater use of our physical plant and allow fixed costs to be spread over a larger number of students.

Many students feel that there is too much pressure upon them to divert attention away from the intellectual purposes of the University. Part of this pressure arises within the student ranks and student housing units. Recommendations for needed changes have been included in an earlier section of the report.

Another pressure for student time is related to intercollegiate athletics, where students are given a book admitting them to all events and a general fund allocation from student fees is made to the athletic fund. Student who wish to attend athletic events are required to spend many hours to obtain their seats or tickets. Other students, particularly at the graduate level, find that other time pressures usually prevent their attendance at these events.

Therefore, it is recommended that consideration be given to selling athletic books to interested students at the rate currently charged faculty members, thus allocating them seats for such events, and allowing students not desiring to attend not to pay for such tickets.

Improved Planning and Use of Physical Resources

Self-liquidating facilities should be continued and extended wherever possible within the University. However, care should be taken that such facilities do not become determinants of educational policy or serve as less satisfactory substitutes for badly needed educational facilities.

Michigan State University has an outstanding existing facility in its University-owned dormitories. Attention should be given to experimental means of allocating dormitory space for academic appropriateness. For example, certain dormitories might be set aside as residential units for persons enrolled in an experimental liberal arts college or for persons identified with a particular major field or college.

Careful attention should be given at all levels in the planning process to the principles of flexibility of usage in the development of future buildings for academic purposes. Fixed classroom sizes tend to freeze class-size patterns which may prove both uneconomic and less effective than other arrangements. For example, if the number of lecture sections of large size is to be greatly increased, as recommended in this report, additional lecture auditoria should be included in new buildings. New academic buildings should also include, as a minimum, office space for the faculty using the instructional facilities of the building.

A priority building list should continue to be carefully formulated, giving particular attention to established program priorities within the University.

Long-range location of colleges in terms of functional relationships should be a continuous part of University planning. For example, such functional planning should consider (1) the close relationships necessary between the College of Communication Arts and the Social Sciences and Humanities, (2) the close relationships necessary between technical-scientific colleges and the related fundamental science departments, and (3) the desirability of certain colleges (such as Veterinary Medicine) being located on the perimeter of the campus.

The policy of involving the faculty who are to use a building in the early stages of planning should be encouraged and extended. Responsible planning should be expected so that wasteful alterations in plans need not be made during final stages.

Our present policy of associating top-level planning personnel for our building and campus programs with ongoing instructional and research programs should be continued. At the same time, information and ideas from such persons should be continually made a part of the type of program planning recommended in this report. The upper floor of the library now allocated to administrative offices should be made available for research offices for faculty at the earliest possible date. Space in the central administration building is grossly inadequate, and the feasibility of moving certain offices most closely associated with student affairs to the Student Services Building should be investigated. This move would centralize the point at which students make contacts with what are essentially student services.

Library Resources

The library is the storehouse of our accumulated knowledge and one of the most important facilities on the campus for the student, the teacher, and the research scholar. Strengthening its holdings and its organization should receive high priority. It would be sophistry to attempt to continue to improve the quality of the University without developing an excellent library. The problem is primarily that of developing a good research and graduate library and strengthening the undergraduate collection.

There is high correlation between the size and quality of library holdings and the generally acknowledged academic standing of the institution. Although Michigan State University is one of the larger of the Big Ten universities (in terms of student enrollment and graduate offerings), only Purdue has a smaller collection of books. There has been considerable expansion in book purchases at Michigan State in recent years, but even now the other large Big Ten schools are adding more volumes annually than Michigan State, despite their much larger initial stock of books and periodicals.

Development of Collections

The most obvious and pressing need is for much greater annual expenditures for materials in the fundamental disciplines selected for special emphasis. The aim should be to build selected library collections which are comparable to the holdings of the major research libraries in the country. In more specific terms, the aim might be set at acquiring a collection of at least 1,000,000 cataloged volumes over the next ten-year period.

Efforts should be made to expand book exchange arrangements with other institutions.

Whenever possible library staff should visit our overseas projects and other foreign book centers to arrange for collection of materials touching our fields of interest. In order to make this possible a Contingency Fund should be established by the library, with ample funds, to enable the purchase of special collections as they come upon the market.

The library should also make provision for cataloging and storing "primary documents," that is, it should vigorously seek to acquire field diaries, detailed statistical tables too lengthy to be published, letters and other unpublished scholarly material which should be preserved. Collecting such primary materials should be shared with the University Museum.

A good map collection should be established by cataloging and building on the present collection in the Department of Geography.

Library Staff

The second most pressing need is for increased staff in the library to develop and maintain the specialized collections. Clearly this is not a responsibility for nonprofessionals. A competent, trained, professional library staff is needed; and in acquiring new staff, special attention should be given to language knowledge and subject-matter training. There should be personnel familiar with each of the main languages represented in the University's collections.

Staff salaries should be competitive with those in other major research libraries. This is essential if we are to recruit and keep competent personnel to service, develop, and maintain the collections.

Library Management

A careful survey should be made of standard reference materials and periodicals. Serious gaps in these necessary research items have been noted.

Library policy in regard to preservation of newspapers, particularly foreign newspapers, should be clarified. In view of our expansion of interest in international affairs, current and recent (5 to 10 years) files of foreign newspapers, at a minimum, will be essential for student and professional research. While it is recognized that newsprint cannot be preserved indefinitely, it is strongly felt that microfilm should be considered only as an undesirable substitute for the

newspaper itself, and should not be resorted to until the end of the ten-year period.

A special allocation should be made to extend and speed up binding of the periodical literature now held on the stack walls of the library. Many periodicals not presently used would be used extensively if properly bound, cataloged, and shelved. Since a periodical collection takes on greater value in direct ratio to the time period it covers, immediate efforts should be made to preserve and bind present holdings.

The Document collection should be collected and bound more systematically in order to be more readily available to users.

The percentage of missing and lost books and periodicals appears to be altogether too high. Good scholarship, teaching, and research are greatly disrupted by these losses. In many cases losses do not seem to be replaced and sometimes they are not replaceable. Better policing methods, including the exit guards used at all other great libraries in the country, should be instituted.

The part of the library intended for research purposes should be completed. Since Michigan State appears likely to outgrow its new library in the very near future, planning should begin for better use of library space and for the necessary additional building allocations.

Library Planning

As the University moves into active program planning, the library must be made an integral part of the process. There are few, if any, teaching, research, or off-campus programs that are not influenced by the quality of the library. As long-range plans are being formulated, the academic departments and University administrators must inform the library of the programs and future book and periodical needs. Without this important link in the communications, many good programs will suffer.

Coordination and Central Administration

In addition to the desirability for greater faculty participation in the planning and policy-making functions of Michigan State University, the achievement of our future role will require the continuation of energetic and farsighted leadership by the central administration.

As in the past, the chief administrative officer of the University, its President, must represent the University to the Board of Trustees, the legislature, and the people of Michigan. He also must represent the University to the nation and the world in a multiplicity of public service responsibilities.

It is highly important that the President be freed of as many details and as much routine as possible in order that he can carry out his important policy-making role in the least harassed and most reflective manner. In order to free the President for such major responsibilities, it is recommended that the staff of his office be increased.

It is recommended that the appointment of an Administrative Assistant to the President be considered, to relieve the President of many of the details of his office routine, represent his office at certain types of activities, and otherwise reduce the inordinate demands upon the time of the President.

In addition, the Committee feels that the Office of the President should contain a staff member, without administrative function, charged with the responsibility for long-range policy and planning for the University. Such a person should not deal with dayto-day problems of administration but, should sit with the administrative group so that he is acquainted with the current flow of activities and their implications for long-range policies. At present, the pressure of day-to-day activities appears to limit the effective formulation of careful long-range planning by the central administration. Continuous study and reflection on such problems will be more effective than sporadic faculty or administrative efforts in this direction. To work with such a staff member, ad hoc faculty committees should be convened when needed to evaluate long-range plans and programs.

The recent establishment of the Office of the Provost of the University has important positive implications for the future. This office, if properly staffed and given the necessary span of authority, can prove of great importance in the future development of the academic program of the University.

The Provost is the chief academic officer of the University. As such, several offices now answering directly to the President should function as staff offices to, or be closely coordinated with, the Provost. Among these should be the Dean of Students, the oncampus functions of the Dean of International Programs, the Dean of the School for Advanced Graduate Studies, the Dean of University Services, and the Director of Continuing Education. It is important that the Provost participate fully in the budget process since all budget allocations affect academic matters, and it is vital that he have authority commensurate with his responsibilities in these areas. Therefore, it is recommended that the program statements of departments, divisions, and colleges and the annual budgets necessary to implement them be coordinated in this office prior to the presentation to the President.

To assist the Provost in the determination of educational policies, it is recommended that a Faculty Committee on Educational Policies be established, representing each of the academic colleges of the University. The faculty committees for research and off-campus programs recommended in earlier sections of this report would function as subcommittees of this over-all policy committee.

Internal Information for the University

There are presently great deficiencies in the system of the accumulation of information needed to implement our policies and goals. Only recently was a beginning made in the collection and codification of the University statutes and regulations. Materials relating to class size, instructional costs, space utilization and other program information have been collected only for the past few years. Information regarding student characteristics is gathered in several units. Research and information relating to the needs of the state and region are scattered widely throughout the University. As a result, policies are made upon the basis of aggregates, rough estimates, or in some cases without the necessary facts. Whereas the University should be the prime source of information for the state regarding probable trends of importance to the institutions of higher learning, we found virtually no such materials available.

In order for the central administration to function effectively, it is imperative that the flow of pertinent information regarding the University and its environment be centrally collected. Therefore, it is recom-

mended that an Office of Institutional Research be established as an adjunct to the Provost's office, drawing together the several scattered offices now collecting such information on the campus and providing additional information not now available. Included in this office should be a position to be filled by different faculty members who have special competence in research areas which would improve the University's understanding of its environment.

Information About Michigan

The University community needs to know far more about Michigan and the mid-continent region of which Michigan is a central and focal part. We have also evolved rapidly from a university serving the state to one serving the nation and the world. We are contemplating an expansion of international efforts and an "infusion of international dimensions" into its campus program. Yet the University draws its student body largely from and is responsive and responsible primarily to inland and insular publics.

If we are to interpret and relate the world for and to Michigan, we must first know Michigan. Much good work has been done for a long time in agricultural experimentation and more recently in the various bureaus and institutes of the University as well as by individual effort. Little research has been done on the economic structure and characteristics of the state, the cultural heritage, the regional implications of the Great Lakes, and the social and educational requirements of the people, and other vital areas of state-wide public concern. As a consequence in making important state and local decisions, much reliance is placed on national aggregates, outside private and public consultants and experts, non-University governmental personnel, and pure conjecture.

Michigan State should be a principal source to which the state and regional publics should turn in seeking information, ideas, and counsel in solving their major economic, social and educational problems. In fact, a key to our future greatness lies in part in the ability of the institution to merge the strengths of its on-campus and off-campus programs. To enable the University and the state to engage in intelligent developmental planning, the library should develop a reference and research library providing accumulated data on the region and the broader communities and publics the University serves.

Information About Students

Michigan State knows far more about the backgrounds, performances, enrollments, and trends of its present students than do most universities. The University knows a limited amount about its future or past students.

Future studies and enrollment projections should take clear account of Michigan State's position in the whole complex of higher education and the increasing role of choice and self-selection exercised by prospective students.

These studies should become the basis from which the University attempts to (1) establish future quantitative and qualitative goals for the composition of the student body, (2) estimate long-range building and budget requirements, (3) inaugurate an improved program of contacts with high schools, junior colleges, and four-year colleges, (4) institute consistent admission policies and procedures that facilitate the early and expeditious admission of promising students.

Some of the information needed includes:

More knowledge of how prospective students perceive us; criteria they use in selection of university and college; the persons exercising the most persuasion in influencing choice; the tendencies of high school students toward multiple applications; scholarship awards and measures that enable deserving students to exercise freer choice in the selection of colleges and universities.

A continuing interpretation of student attitudes regarding programs, and a systematic flow of such information to the appropriate academic units.

Data on transfers into and out of the University.

Far more information about the progress, problems, and evaluation of its alumni—and the willingness of the alumni to aid the University. This information is important to the registrar's office, the colleges and departments, and the alumni office.

Information About Faculty

Information on and about the faculty is fairly complete and requires not so much expansion as a change in the types of information and the uses to which they are put. Much of the basic faculty data, such as name, rank, salary, degree, age, sex, etc., is being transposed to IBM cards in such a form that the information can serve a multitude of purposes.

Much more information will be needed about faculty as the University moves in the future toward (1) a more consistent and coherent system of rewards, (2) programs based on faculty strengths, and (3) more effective use of faculty in determination of University policies and procedures.

Proposed Sources of Funds to Achieve the Programs for the Future

The priorities suggested in this report require, in many instances, much larger expenditures than have previously been made. In the long run it may appropriately be expected that the resources necessary to achieve the University's objectives will be provided by the state as a full understanding of the importance of its program to the people of the state is acquired. At the same time, some redistribution of funds within the University in keeping with new emphases can assist in achieving new objectives. The following are suggested as sources of funds for these purposes.

The main source of funds would appear to be those accruing from increased efficiency in the instructional programs, brought about by reducing the number of courses and sections and by consolidating duplicative offerings in various colleges and units.

A second source would derive from de-emphasizing and phasing out existing programs which do not rest upon a sufficient background of theory or research to merit their profitable extension into graduate work.

A third source would derive from application of the principle that off-campus courses should operate on the same standards of economy of faculty time (including class size) as on-campus offerings.

A fourth source could come from the reduction of service activities of an agency type which may be more appropriately provided by other institutions, offices, or concerns. In part we may reduce the demands made upon the institution by helping local groups to take on such services directly.

A fifth source would come from the selection, in each administrative unit within the institution, of areas which may appropriately be deemphasized or maintained at a small but sound level.

Finally, as more equitable distribution of funds is achieved between units, as greater budget flexibility is provided at the level of academic decision-making and accountability, and as the University moves into a program which utilizes its facilities throughout four terms per year, funds will be used more efficiently in the achievement of program objectives.

Long-Range Planning for the University

In recent years, public support of higher education in the state has fallen far short of the needs apparent to the universities and colleges. These inadequacies may in part be the fault of the institutions themselves for having failed to make clear the long-range importance of the programs they were requesting in their annual budgets. We are convinced that a wealthy and farsighted state will adequately support sound educational programs if the importance of the programs and their relation to the needs of the state are adequately presented.

Basically, we believe that state appropriations should be sufficient to cover the educational needs of the state. If we are to anticipate that the state will assume this responsibility, which rightfully resides with it, certain basic changes in approach to the state must be made. If this University and other institutions of higher learning are ever to receive the support which is really required for higher education in this state, the following become minimum essentials:

The institutions of higher education, individually and collectively, must engage in a program of public education which will acquaint the public with the true purposes, needs, and contributions of higher education.

Under the constitution of the state, the University is accountable to the *people* of the state. Its Board of Trustees is elected, at large, by all the people of the state. Therefore, the University must recognize its accountability to the people on its performance and should expect the people to look to the University to demonstrate a record of sound achievement.

Requests for funds must be supplemented by clear statements of immediate and long-range needs of the institution based both on public requirements and on program considerations.

Therefore, each department and college should prepare a long-range program consistent with the general objectives and criteria developed for the University. General goals and outlines contained in the report should serve as guidelines. All academic units should give early attention to program plans which include statements of long-term objectives, distinctiveness of approach and emphasis, planned contributions to the program of the total University, and a schedule for discontinuing courses, fields and curricula no longer contributing to the central program. Such programs should be reviewed by appropriate educational policy groups at all levels.

The total University program derived from these detailed programs should then be presented to the public and the legislature with the annual budget necessary to implement the current phase of the program. For purposes of presentation to the legislature, greater emphasis should be placed on program because of its integral relation to the University's budget and the desirability of informing the legislature on problems and programs in higher education.

This represents a departure from past methods of operation. It appears, however, that changes are necessary to forestall the present attempts to restrict the constitutional autonomy of the University by placing

all public institutions of higher learning in Michigan under the control of a single commission with line budgets determined without regard to program content or quality.

The public which supports the institutions of higher learning in the state will look for coordination among them. Michigan State should take active leadership in voluntary cooperation among these institutions. The initial phases of such cooperation might be developed in off-campus programs. In addition, joint participation of the larger universities in financing and use of some of the very expensive facilities needed for advanced research in certain of the physical sciences should be explored. Such facilities might be centrally located and serve the needs of more than one institution better than lesser facilities on each campus.

Proposed legislation to centralize the planning and coordination of all higher education in the state would seriously impair the development of effective academic programs in all institutions and prove to be false economy over the years. Therefore, maximum cooperation is needed to forestall, if possible, such action by the legislature.

The Charge to the University of the Future

Having achieved greatness in many undertakings during its first century, Michigan State University turns now toward a future charted only partially by these beginnings. In its future also lie large areas for development only partly defined or still wholly unknown.

Simultaneously, the most terrifying alternatives of any age in history and the greatest challenges to turn our newest concept of science and technology to peaceful purposes confront us. As an institution of higher learning devoted to solving significant problems of society, Michigan State University is, in a measure, destined and committed to assume a responsible role in helping to shape a better tomorrow from our present world, torn as it is by revolution in many parts and divided by one of the sharpest ideological conflicts in human history. Recognizing the crucial need for informed and dedicated leadership by institutions and by individuals, the University must step forward with new strength and new determination to pioneer again, in keeping with its great tradition.

This new frontier has dimensions vastly different from our earlier concerns with agriculture and technology. One new emphasis, if the University is not to default on what may be our greatest challenge, must be in the direction of human behavior and interrelationships. To the exploration of these areas, we must apply scientific methods of investigation to assess our present knowledge and to discover new truths and relationships. Neither Michigan State University nor other colleges and universities of stature and foresight can afford to continue to ignore the indictment that in the past more research effort and support have been

directed toward plants, animals, and the elements than toward human development and behavior.

A second new emphasis must involve us in a deeper awareness of the languages, cultures, and ideologies of other countries a well as a more comprehensive and intelligent understanding of our own diversified nation. Imaginative ways must be found to interrelate our international programs with on-campus teaching, thus giving greater opportunity for student contact with faculty member who have been active participants in other cultures.

To realize its full potential, society must apply the methods of scientific research to its problems. The University will bring its competence, its methods of inquiry, to bear on these problems.

As the society solves its problems, it educates its citizens and becomes progressively both a better place to live and a better laboratory for faculty and students. In the University of the future we shall be building a two-way street between society and the University. This street will lead not only to the local areas but to the state, the region, the nation, and the world. Thus both faculty and students will extend their awareness of and deepen their relationship to human beings through contacts with local areas and foreign countries.

A sharper realization of the proximity of national and world issues to the campus is being noticeably reflected in the programs for teaching and research in the most forward-looking universities. Political science, economics, history, and international affairs cannot be regarded today by teacher or student as pages in a book or lectures in a classroom. Rather, they are

ever-changing forces influencing the shape of today and tomorrow, often with fearful predictability. The University must make it a primary concern to see that its faculty and students recognize and deal with these as vital issues of our times.

Because of the urgent need for the mature and thoughtful consideration of great problems, the atmosphere of the campus of the great University of the future, its very climate and attitudes, must undergo a kind of metamorphosis to create an image in keeping with a new seriousness of purpose. The University must make certain that it is viewed by none as a refuge for its faculty from the confusion and complexities of our world or as a playground where students diligently prolong their immaturity.

Aspiration to greatness, frequently verbalized without full realization or acceptance of the necessity for the hard choices involved in selectivity and implementation, has come to have the vacuous ring of a platitude uttered too often. A university's aspiration to true greatness, undertaken with full cognizance of the implications for decisive action based on careful analysis of the alternatives, has a clarion tone which will be heard by dedicated teachers, students, and researchers around the world. And they will respond to this challenge, seeking to identify with and contribute to the stream of knowledge from such a source, realizing that herein lies a rare opportunity for productive, meaningful, creative activity.

Here, in a University sincerely aspiring to greatness, will be found an administration and a faculty working together in the pursuit of truth and the understanding of man and his world. This University will put emphasis on creative teaching and research and will reward originality and effort to advance knowledge. It will not penalize the critic for his opinions nor reward the complacent for their silent acceptance of the status quo. Since students cannot be expected to work with zeal or the people of the state to support the University with enthusiastic approval unless faculty morale is high, both faculty and administration must maintain relations with one another that will concentrate the faculty member's energies and capabilities on creative achievement. Both faculty and administration will recognize that the central purpose of the University is to teach and to discover new knowledge and that the work of administrators and faculty participation in administration are not ends in themselves but means to the attainment of the University's central purposes. Thus the key to faculty morale will be recognized not as a schematic structure but as a set of fundamental human attitudes and appreciations with widely shared purposes.

Reaching toward new greatness, the University will turn to the special competencies of faculty members. It will listen carefully to their considered opinions in the knowledge that achieving its greatest potential rests not with a few but requires the best from each member of the University community. In this era of achievement, there will be increased respect for and recognition of the scholar, freedom of thought and expression, tolerance for the dissenting opinion, and room for the idea born ahead of its time in history. The researcher and the scholar will be encouraged to probe and explore the inaccessible, to undertake the impossible. In the University of the future will be meshed the goals and the efforts of the student, the teacher, and the researcher toward their mutual purpose of learning.

Here, accessible to the scholar, both student and teacher, will stand libraries worthy of their vital role as the heart of a great University. Students and faculty flowing to and from these libraries will attest to the central part they have come to play in education. Large collections, readily available, will extend our vision beyond the confines of the classroom and the textbook. Here scholar-teachers will engage in the pursuit of knowledge to enrich their teaching and to push back the frontiers of man's thought; here they will grapple with the major problems which confront society. These libraries will be the storehouses for the riches of the past, the records of great men, ideas, and civilizations, as well as a source of the accounts of the most recent advances in the search for new truths and new meanings of old truths.

Undergraduates in the University of the future will be encouraged to develop maturity and broader perspective. Here the student will find challenge and inspiration, an invitation to think and to reach beyond what he has previously conceived to be his limitations. The aim of the University in both its formal and informal guidance of the student will be toward making him increasingly self-directive and responsible for his own education. Thus stimulated, the student of the University may reasonably be expected to become a student of the world.

Moving toward the future, Michigan State University will address itself to the new developmental needs of the increasingly industrialized state. Its colleges will develop and relate their advanced and graduate

programs appropriately to make substantial contributions through distinguished leadership and research.

Also implicit in the role of a great university is the acknowledgment of the contributions of other institutions of higher learning. By intelligently relating its activities to those of community and regional colleges and other universities in the future, Michigan State University will identify itself as an outstanding leader in the field of higher education. This will require continuous appraisal of both needs and trends to discover how the University can best make its most distinctive contribution.

In meeting its commitments to the future, the faculty of the University must assume a mature and responsible attitude in fulfilling its role. It must take on the task of informing itself and its publics of the vital role of education in the future of the world. Although we can be proud of our past achievements and our heritage, the future has requisites of its own. The frankness and honesty with which we analyze our present in terms of our strengths and our shortcomings and the courage with which we mount above the present will determine our future greatness.

The detailed report of the Committee on the Future of the University was built on the belief that the

future begins today. More important, it was built on a confidence that education makes a difference, that our University can be a profound influence in the future which lies ahead. The extent to which we measure up to the challenge of the future cannot be assured in the report of a committee, but only by the total response of the University community. Our times are urgent; our vision must be great.

Like its counterparts of the past, the great University of the future will be characterized by integrity of purpose, its leadership distinguished by the statesmanlike wisdom and courage essential to proceeding into uncharted realms. Having set its sights toward such a future, neither the University nor its leaders in administration, teaching, or research will be easily diverted from the course by popular accolade or considerations of expediency. Thus, the aspiration for and the dedication to greatness, not to be undertaken lightly by any, must constitute both the reason for and the purpose of the future of this University. We dare not seek a moratorium on the present; balanced precariously just ahead, awaiting the decision of administrators and faculties of the world's great universities, are the very values upon which our freedom was founded and our educational system was established.

Annexes

 ${\bf ANNEX~I}$ Fall 1958 Courses at 100 and 200 Levels With More Than 100 Students

College and Department	Course Number	Number of Students	Numb	ER OF SE	CTIONS	Average Number of Students per Section		
	NUMBER	STUDENTS	Lec.	Rec.	Lab.	Lec.	Rec.	Lab,
Basic Improvement Services	91 92 93 94	418 315 110 252		24 17 12 12			17 19 9 21	
Communication Skills	111 112 113	3069 296 304		118 13 13	118 13 13		26 23 23	26 23 23
Natural Science	181 182 183	3538 249 503		125 9 19	125 9 19		28 28 26	28 28 26
Social Science	231 232 233	2222 512 567		54 13 13			41 39 44	
Humanities	$241 \\ 242 \\ 243$	2338 540 619		53 14 16		ŀ	44 39 39	
Agriculture Agriculture	101	198		1			198	
Soil Science	105	134	3		8	45		17
Business and Public Service Accounting	$210 \\ 211 \\ 212$	622 174 231	3 1 1	20 5 5		207 174 231	31 35 46	
Economies	$200 \\ 201 \\ 202$	937 343 267		29 10 8			32 34 33	
Hotel, Restaurant and Institutional Management	102	105		3			35	
Personnel and Production Administration	101	349	2	8		174	44	
Police Administration	110	111		1			171	
Political Science	250A 251A	179 121		5 3			36 40	
Communication Arts General Communication Arts	100	160		1			160	
Speech	108	321		14		<i>.</i>	23	
Education Foundations of Education	206 101 200	230 129 655		10 1 14			23 129 47	
Health, Physical Education, and Recreation	115 120 122A 126A 131 141 146 150A 150C 163 171A 182 183 196 103 191	2204 598 120 341 155 103 397 129 105 109 104 507 169 256 210 185		5 5	85 20 4 11 6 3 9 4 3 3 5 8 8 3		42 37	26 30 31 26 34 44 32 35 36 21 63 56 28
Teacher Education	227	127		4	4		32	32
Engineering Mechanical Engineering	160 280	232 109	2 2	5	17	116 54	22	14

College and Department	Course	Number of		Number of Sections			Average Number of Students per Section		
	Number	STUDENTS	TUDENTS Lec.		Lab.	Lec.	Rec.	Lab.	
Home Economics Home Management and Child Development	161 165	101 186		3 5	3		34 37	34	
Textiles and Related Arts	140 170	151 101		8 6	8 6		19 17	19 17	
Science and Arts Art	104A 104B 133A 266A	182 102 192 114		5	8 5 9		23	23 20 21	
Botany	201	248	2		10	124	 	25	
Chemistry	101 103 111 113 261	570 158 536 129 169	4 1 5 1 2		26 9 28 7 11	142 158 107 129 84		22 18 19 18 15	
English	158 200 210A 230A 240	183 128 124 128 127		6 6 4 5 3			30 21 31 26 42		
Entomology	200	105	2		5	52		21	
French	101A 202A	190 116		8 5			24 23		
Geography	204 213	194 325		$\begin{array}{c} 4 \\ 18 \end{array}$		· · · · · · · · · · · · · · · · · · ·	48 18		
Geology	201	123	1		6	123		20	
German	101A	200		9	 		22		
History	111 222A 222B 222C 241A 241B	259 512 141 126 361 171		4 9 2 2 7 3			65 57 70 63 52 57		
Mathematics	101 102 104 111 112 113 224 225 226	385 222 346 489 106 157 139 311 129		15 9 12 18 4 6 5 12 5			26 25 29 27 26 26 28 26 26		
Music	118 145 A	102 122		6	1 6		20	102 20	
Philosophy	101A	250		9			28		
Physics	158 251 271	263 120 272	3 3 2	9 5 11	6 17	88 40 136	29 24 25	20 16	
Psychology	101 201 240 260	156 747 138 170	1 1	9 19 5 6		138 170	17 39 28 28		
Religion	105	119	,	3			40		
Sociology	241 251 271	201 189 157		5 5 4			40 38 39		
Spanish	101 A	114		6			19		
Zoology	207	168	1		6	168		28	

 ${\color{blue} \mathbf{ANNEX\ II}}$ Courses at 100 and 200 Levels With More Than 100 Students 1957-58

College and Department	Course Number	Текм	College and Department	Course Number	Тевм
			Education (Continued)		
Basic Communication Skills	111	FWS	Health, Physical Education and		
Committee Commit	112	FWS	Recreation (Continued)	161	$\mid s \mid$
	113	FWS		170	FW
Humanities	241	FWS		171a	FW
	242	FWS		174	FW
No. of the state o	243	FWS		180a	FW
Natural Science	$\frac{181}{182}$	FWS FWS		181	WS
	$\frac{182}{183}$	FWS		$\frac{182}{183}$	FWS FWS
Social Science	23 I	FWS		195	FWS
boom belief	$\frac{231}{232}$	FWS		196	FWS
	233	FWS		185a	W
1 griculture				103	FWS
Agriculture Economics	101	$\mid \mathbf{s} \mid$		191	F
Agriculture Engineering	101	W		226a	S
Animal Husbandry	111	F	Teacher Education	227	FW
Dairy	101	S	Programme and the second secon		
Farm Crops	101 101	F F	Engineering Civil Engineering	251	FS
Horticulture	101	\mathbf{w}	Mechanical Engineering	101	W
Bon Beienee	105	F	Mechanical magnituding	160	FS
Business and Public Service	.100			280	F'
Accounting	210	FWS	Home Economics		
	211	FWS	Home Management and Child		
	212	FWS	Development	161	F
Business Education	218	F		165	FW
Economics	200	FWS	Textiles and Related Arts	140	FW
	201	FWS		150a	S
Comment Don's and	202	FWS	Science and Arts	170	FW
General Business	101	FWS	Art	101a	FWS
Hotel, Restaurant and Institutional Management	102	F	MI 6,	104b	FWS
Police Administration	110	ÎF		133a	F
Political Science	250a	FW		[33b	W
	250b	W		266a	F
	251a	F		266b	W
Social Work	228	S	Botany	201	F'
				202	W
Communication Arts	7.00	F	Chamin	203	S
General Communication Arts	100 108	FWS	Chemistry	101 102	FW WS
Speech	128	ws		102	FWS
	206	FWS		111	FW'
	212	FWS		112	WS
Education				113	FS
Foundations of Education	101	F		221a	WS
** * * * * * * * * * * * * * * * * * * *	200	FWS		261	F
Health, Physical Education and	7.00	133370	17. 11.1	262	W
Recreation	120	FWS	English	155	W
	122a	$oxed{FS}$		158 200	FWS FWS
	124 125a	FS		200 210a	FWS
	125a 126a	FW		2104	FWS
	127	w'		230a	F
	130a	FW		230e	Ŝ
	131	FWS		240	F
	132	FW		241	W
	133a	FS	French	101a	F
	142	W		101b	W
	146	FWS	Cormon	101c	S
	150a 150b	FWS S	German	101a 101b	W
	1506 150c	FWS		1016 101c	S
	151	S	Geography	204	FWS
	153	$\mid \ddot{\mathbf{s}} \mid$	San Branch and San	213	FWS
	163	FW	Geology	201	P

ANNEX II--Concluded

TO THE STEEL OF STEEL

College and Department	Course Number	TERM
Science and Arts (Continued)	"	
History	111	FW
thatory	112	l w'
	113	$ \dot{s} $
	222a	FWS
	2226	FWS
	222c	FS
1	241a	FWS
	2416	FWS
Mathematics	100	FWS
	101	FWS
	102	FWS
	103	\mathbf{s}
	111	FWS
	112	FWS
	113	FWS
	152	FWS
	224	F
	225	FWS
	226	FWS
Music	118	F
	145a	FW
Philosophy	101a	FWS
Physics	158	FW
	168	WS
	178	$\mid S \mid$
	251	F
	271	FW
	272	W
	273	s
Psychology	101	FWS
	201	FWS
	240	FWS
	260	FWS
Religion	101	WS
	105	FW
	215	F
Sociology	241	FWS
	251	FWS
	271	FWS
Zoology	207	F
	208	W
Voteniname Madiaine		
Veterinary Medicine Missoliatory and Dublic Health	020	F
Microbiology and Public Health	232	W
Physiology	224	Į VV

ANNEX III

Comparison of General Purpose Classroom Capacities with Number of Meeting Hours Per Week for Sections of Comparable Size

Capacity of Room or Number in Section	PER WI	g Hours EEK for CTION SIZE	Available Rooms of Stated Capacity			
	Number	Percent	Percent	Number		
1-10	389.5	6.8	0.5	1		
11-20	1263.0	21.6	0.5	1.		
21-30	1649.0	28.1	13.2	25		
31-40	1208.0	20.6	25.4	48		
41-50	1082.0	18.5	18.4	31		
51-60	156.0	2.7	10.1	19		
61-70	40.0	0.7	6.3	12		
71-80	54.0	0.9	13.8	28		
81-90	13.0	0.2	4.8	9		
91-100			6.9	13		
01 and above	1.0	0.1	2.1	4		
Total	5858.5			189		

ANNEX IV

Comparison of Auditorium Capacities with Number of Lecture Hours Per Week for Sections of Comparable Size

Capacity of Auditorium or Number	Per Wi	g Hours eek for ction Size	Available Rooms of Stated Capacity		
in Section	Number	Percent	Percent	Number	
Under 100	231.0	63.1			
100-150	70.0	19.1	20.0	3	
151-200	28.0	7.6	26.7	-1,	
201-250	30.0	8.2	6.7	1	
251-300	7.0	1.9	13.3	2	
301-350			26.7	4.	
606			6.7	1	
Total	366.0			15	

 ${\bf ANNEX\ V}$ Class Hours and Student Station Hours Per Week by Type of Room

	Hours Available	Hours Scheduled	PERCENT SCHEDULED	CAPACITY OF ROOMS	STUDENT STATION Hours	PERCENT OF CAPACITY
General Purpose Classrooms	8,316 $1,452$ 660 $9,108$	5,858.5 1,060.5 369.0 4,005.0	70.4 73.0 55.9 44.0	452,760 47,916 168,124 225,148	172,563.5 21,855.0 32,544.0 77,796.0	38.1 45.6 19.4 31.6
Sub-Total	19,536	11,293.0	57.8	896,412	301.768.5	34.0
Gymnasia. Department Conference Rooms Faculty Office. Non-Classroom		467.0 70.5 40.0 3,139.5	70.8		15,194.0 542.0 201.5 50,329.5	
Total		15,010.0			371,038.5	

 ${\bf ANNEX\ VI}$ Station and Hour Use of Auditoriums by Building

Building	Number of Rooms	Hours Avail- able	Hours Sched- uled	PER- CENTAGE SCHED- ULED	Capacity OF ROOMS	Possible Student Station Hours	Actual Student Station Hours	Per- centage of Student Station Hours Used
Agricultural Engineering		44	16.0	36.4	259	11,396	513.0	4.5
Agricultural Hall	1	41	25.0	56.8	156	6,864	1,213.0	18.1
Anthony Hall	2	88	28.0	31.8	782	34,408	2,696.0	7.8
Auditorium	1	44	35.0	79.5	125	5,500	486.0	8.8
Electrical Engineering	1	44	19.0	43.2	289	12,716	1,246.0	9.8
Giltner Hall	1	44	30.0	68.2	334	14,696	2,877,0	19.6
Home Economics	1	44	21.0	47.7	130	5,720	825.0	14.4
Horticulture Building	1	44	21.0	47.7	325	14.300	3,287.0	23.0
Kedzie Chemistry Laboratory	i i	44	41.0	93.2	312	13,728	4,303.0	31.3
Natural Science	3	132	106.0	80.3	663	29,172	11,987.0	41.1
Olds Hall	ĭ	44	9.0	20.5	247	10,868	936.0	8.6
Physics-Mathematics	î	44	18.0	40.9	199	8,756	2,155.0	24.6
Total	15	660	369.0	55.9	3,821	168,124	32,554.0	19.4

Kiva and Kresge Art Building Auditorium have been added since this table was compiled.

ANNEX VII

Course Enrollments Per Full-Time-Equivalent FACULTY MEMBER, BY COLLEGES

Academic Year 1957-58

College	F.T.E. Faculty Mem- bers ¹	Course Enroll- ments ²	Average Course Enroll- ment Per F.T.E. Faculty Member
Agriculture Basic Business and Public Service Communication Arts Education Engineering Home Economics Science and Arts Veterinary Medicine	115 134 178 59 141 116 53 427 56	13,554 45,937 41,596 7,505 35,908 11,750 5,412 71,600 5,768	118 250 234 127 255 101 102 168 103
Total University	1,329	239,030	180
(excluding HPER) Total University (excluding HPER)	95 1,283	13,997 217,119	147

For the fall lerm and according to the budget for instructional salaries. Restricted to faculty members in the instructional departments of the nine colleges. Includes department heads and budgeted positions for graduate teaching assistants.

Includes Short Courses (according to Colleges providing the instruction) but excludes Continuing Education and Summer Sessions.

ANNEX VIII

Number of Courses in the 1958-59 Catalog BY COLLEGE AND BY COURSE LEVEL

C	Course Level							
College	0-99	100- 200	300- 400	500	Total			
Basic	5	12			17			
Agriculture		40	267	116	423			
Business and Public Service		46	278	128	452			
Communication Arts		16	109	39	164			
Education		76	160	98	334			
Engineering		20	142	119	281			
Home Economics		24	98	40	162			
Science and Arts	9	302	719	342	1,372			
Veterinary Medicine		9	108	39	156			
Interdisciplinary			1	1	2			
Total	14	545	1,882	922	3,363			

ANNEX IX

Suggested Areas for Further Study

Limitations imposed by time made it necessary for the Committee to devote itself almost exclusively to the consideration of areas concerned with the heart of a great university: its undergraduate, graduate, and research programs.

There are, however, many internal agencies, facilities, and services which can contribute substantially to the attainment of the objectives set forth in the early chapters of this report. A review of policies and practices for their operation would seem pertinent to assure that each is giving maximum support to teaching and research function.

Other aspects of the over-all University operation, discussed only briefly by the Committee and without definitive recommendations in this report, may well be worthy of additional consideration. Such items are listed here with the suggestion that their relationship to the goals of the University be further explored.

Operational policies and procedures of service departments should be carefully examined and streamlined to increase their effectiveness. Although brief reference has been made to a few of these, it is suggested that their procedures be reviewed and their relation to the academic goals of the University be clearly defined. Information concerning the service departments should be made more widely available in the faculty handbook. The following are suggested for study:

General services: central stenographic, photographic services, campus mail, purchasing department, general stores, buildings and utilities departments.

Hospital and health services.

Campus police.

Union Building and Kellogg Center facilities.

Concessions.

Athletic facilities for student and staff use.

Lecture-concert series.

Retirement and insurance.

Use of University vehicles.

A re-examination of the allocation of student time during the calendar year might result in adjustments which would implement the primary goals set forth for the University in the future. Special consideration might be given to:

Establishing a school year of four quarters and extensively reviewing the adequacy of offerings in the summer sessions.

Condensing examination periods and registration schedules to permit maximum use of time for teaching.

Reconsideration of dates scheduled for June commencement in view of the practice of requiring graduating seniors to take examinations.

Re-examination of the multiplicity of three-credit courses in the typical undergraduate program.

Although the attention of the Committee has been called to the numerous publications emanating from the University, we did not consider it our province to undertake a study of this scope and nature. However, a careful analysis should be made

Annex IX (Concluded)

by a qualified group (1) of the special purposes of publications and (2) an evaluation of the fulfillment of these purposes. Attention might be directed toward:

The number of miscellaneous publications prepared for a wide variety of publics.

Policies, procedures, and purposes of the M.S.U. Press.

Refinement and clarification of procedures for manuscript preparation and publication by Experiment Station and Extension Staff.

Ways and means of improving the academic coverage and the quality of the content of the State News.

In exploring ways to increase the effectiveness of teaching and to utilize most extensively the talents of outstanding faculty, the Committee agreed that a comprehensive study should be made of the potential offered by such media as television (including more closed-circuit use), radio, and educational films.

Although no specific recommendations are included in the body of this report, it is generally agreed that such a study, made by qualified personnel, might have special implications not only for on-campus teaching, but also for off-campus programs.

A study of the facilities, services, and procedures of the Audio-Visual Center and the relationship of the Center to the teaching function of the University would be pertinent.

The Honors College Program should be encouraged and implemented. Certain modifications of present policies, suggested to the Committee, are presented for consideration:

By the end of the sophomore year, each Honors College student, as a condition for continuance in the college, should present a proposal for his further study embracing honors work, individualized study, or other features demonstrating an intent and purpose of merit.

A seminar of the Great Issues type should be introduced and required of all Honors College students in their senior year.

Each Honors College student should be required to prepare a senior thesis.

Criteria for election to the Honors College should be broadened to include consideration of unusual aptitudes, marked leadership qualities, and evidence of creativity accompanied by high quality performance (even though the student is not in the top ten percent of his class according to grade point average).

The placement (in terms of administrative organization) and functioning of the Honors College should be thoroughly reevaluated within the next five years.

It is the belief of the Committee that the services rendered to the faculty and students by the Office of the Registrar are of great importance to the smooth operation of the administrative and record keeping function of the University. Because of the vital role of this office, the Committee believes the following suggestions should receive special attention:

Create more positions at the professional level, upper-supervisory level, and raise approximately half the clerk-typist positions to Clerk II or III, with commensurate training and responsibility.

Provide additional space on one floor or elevator-connected floors to permit efficient flow of work.

Consider the physical relocation of this office to the Student Services Building so that the administrative offices most visited by students may be centralized in one location.

Although little mention is made in this report of the relationship between Michigan State University and M.S.U.-Oakland, the Committee is aware, with the development of this new branch, that there will be important implications in the future for both institutions. It is hoped that there will be mutual concern for the continued development of high quality undergraduate programs in both, built upon the unique capacities of each.

The Committee is keenly aware of the need for advancing the development of high-level graduate and professional programs. We believe there will be urgent need in the future for (1) strengthening existing programs and the forms of organization conducive to their development; (2) reviewing the need for graduate professional schools of law and medicine; and (3) emphasizing the pre-professional training and foundation disciplines that are essential to outstanding graduate programs.

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