

**STRATEGIC PLAN
OAKLAND UNIVERSITY**

GRADUATE EDUCATION

OCTOBER 1, 1993

OPEN HEARING

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In February of 1993 the Task Force on Graduate Education began working to fulfill its charge as stated in the original Strategic Planning document: Plan for the advancement of graduate education, including the development of a prioritized list of new programs and ways to serve a diverse student population. Throughout our discussions and deliberations of graduate education, we were guided by the steering committee's vision statement. The goals and philosophies expressed in the vision statement are pervasively threaded throughout our conclusions and recommendations.

The Blue Ribbon Task Force on Graduate Education met at least biweekly, and often more frequently, since the beginning of the strategic planning process. Information was requested from units that presently have graduate programs as well as units that expressed an interest in initiating new graduate programs (Appendix 1). The task force received and analyzed this detailed information from academic units (Appendix 2) concerning the present and future state of graduate education at Oakland University. These extensive data allowed the task force the uncommon opportunity to review all graduate programs simultaneously. The task force surveyed both alumni (Appendix 4) and current graduate students (Appendix 5), and also solicited input from the university community at large (Appendix 6). In addition, a number of speakers on a variety of topics related to graduate education appeared before the task force to offer further comments and suggestions, and to respond directly to questions about existing and proposed graduate programs. Publications on the areas of research and training that are projected to have high future demand were examined (Appendix 8), as was information on student stipends (Appendix 7), student recruitment (Appendix 11), and student diversity (Appendices 9,10). As a result of this process, the task force has reached several general conclusions about graduate education at Oakland University.

In many respects our present graduate programs encompass the wide range of programs characteristic of a comprehensive university. They serve a diverse group of majority and minority students, among whom are full- and part-time students, professionals seeking

further skills and qualifications, traditional and non-traditional as well as local and international students. In the view of the task force, these programs and the students they serve represent an essential component that distinguishes our university from other local and regional institutions.

The task force found that, in general, there is a high level of student satisfaction with the quality of the current graduate programs. These findings were also echoed by our alumni. Many programs are thus justifiably proud of their accomplishments in providing quality graduate education.

However, the task force found that many academic units are struggling to maintain their existing graduate programs with resources that are static or declining. If Oakland is to achieve the distinction mandated by the vision statement of the strategic planning process, we feel that it must devote significantly greater resources to graduate education. This is particularly true if Oakland expands graduate education. Larger graduate enrollments and additional doctoral graduates would, in turn, benefit Oakland in terms of increasing its visibility and changing its Carnegie classification for state funding purposes.

In allocating resources, the university should be sensitive to the different program objectives that underlie current and proposed graduate programs at Oakland. For example, some programs have, as an intrinsic part of their character, collaboration with industry and educational or other community institutions. Other programs are driven by strong student demand. A number of programs train professionals who respond to national and regional needs. Still others address traditional academic objectives. All of these objectives are worthy of university support.

The university should also recognize the benefits of having a sizable contingent of full-time graduate students who are drawn from a national pool, and who identify strongly with the institution and their home department. Such students contribute significantly to

the character of the institution by their full-time presence on campus and greater availability for teaching and research activities. This is especially important in the case of Oakland whose campus atmosphere would especially benefit from greater student institutional involvement and identification. Such a body of graduate students can only be developed and maintained with significant university support.

We emphasize that the committee believes strongly that all graduate programs must be quality programs. Our survey of alumni document that the quality of our faculty and the quality of our academic programs are perceived by alumni as Oakland University's primary strengths. We urge the university to jealously guard our reputation for academic excellence. For this reason, all of our recommendations for graduate programs are contingent upon the provision of resources sufficient to assure their academic excellence.

For the remainder of our report, we make a series of specific recommendations, some of which are strategic in nature and others that are tactical. We have prioritized our recommendations and have briefly discussed the evidence and logic that led to each recommendation.

STRATEGIC RECOMMENDATIONS BY THE TASK FORCE
ON GRADUATE EDUCATION

The following strategic recommendations are ordered from the highest (1) to the lowest (5) priority. Tied recommendations are given identically numbered priorities.

- 1a. The pay level for masters and Ph.D. stipends should be substantially increased. The task force recommends that for full-time masters students, the minimum stipend be \$6,500 with a range of \$6,500 to \$8,700. For full-time Ph.D. students, the minimum recommended stipend is \$9,000 with a range of \$9,000 to approximately \$11,000. The task force also recommends a significant increase in the number of stipends available to Oakland graduate students.

Stipends at Oakland University pay one-third to one-half the amount of stipends at comparable institutions in Michigan and in other states (Appendix 7). Graduate stipends at O.U. have essentially remained unchanged for the past 13 years. A nearly universal comment by academic units was that our graduate stipends are inadequate and not competitive. The ability of Oakland to attract and retain quality graduate students is severely hampered by its inadequate stipends. The low stipends also adversely affect the quality of graduate students' research by forcing students to work multiple part-time jobs to meet basic living expenses. This, in turn, frequently increases the duration of the graduate program. Stipends serve needs other than simply to provide living expenses. For example, in many disciplines graduate teaching experience is an essential and integral part of graduate training and serves to prepare students for entrance into professional schools and certain careers.

The task force recommends that stipend levels be adjusted above the recommended minimums on the basis of student seniority in the program, degree held (bachelors or masters), and other factors such as stipend levels for comparable programs at other

institutions. It is also our recommendation that stipend levels be reviewed periodically, perhaps annually, by the Graduate Council to adjust stipends on the basis of such factors as inflation or pay increases awarded to Oakland staff.

The total costs in raising stipend levels should be evaluated in light of the fact that graduate assistants contribute to the revenues of the University through credits generated by teaching assignments in some units and, potentially, through increased state support via formula funding. In addition, the task force heard from several units in its open forum about the benefits of using graduate assistants, rather than part-time instructors, in classroom instruction. It is our recommendation that units examine their part-time instruction to determine if such instruction might be better assumed by graduate teaching assistants.

- 1b. The task force recommends that tuition awards accompanying stipends cover tuition for the minimum number of hours required for completion of a program. Furthermore, Oakland should provide tuition awards for those students supported by external grants that generate overhead for the university. Oakland should also provide additional assistantships to departments on a matching basis for each assistantship that is funded from an external grant. Monies for matching stipends should come from overhead produced by external grants and priority for the awarding of these matching stipends should be given to grants that generate overhead. The task force recommends that Oakland also provide special tuition awards not associated with stipends. These special tuition awards would be granted on the basis of merit to promising students who (1) did not receive a stipend, (2) were ineligible to receive a stipend because they worked part-time, or (3) received a stipend from a grant that did not generate overhead for the university.

Presently, in some programs tuition awards accompanying stipends do not cover the minimum tuition required for the completion of a program. In the Department of

Biological Sciences, for example, the tuition award accompanying a stipend is 8 credits per semester. Because the M.S. in biology is a two-year, 36 credit program, students supported by assistantships must pay for 4 credits of their tuition to complete the program in two years.

By providing tuition awards for students supported by external grants, Oakland could encourage faculty to support their students with grant funds. Tuition awards, as well as matching stipends for grant supported stipends, would increase the number of available stipends and presumably expand our graduate student enrollment.

Many university graduate programs around the country include a second type of award, limited to tuition remission. This is highly desirable because such awards can serve as stopgap funding for students anxious to enter a graduate program, but who may be unable to immediately obtain a full stipend. Potential graduate students who would clearly be an asset to the institution are often discouraged from entering a graduate program if they fail to receive any financial assistance.

- 1c. Upon implementing the recommended increases in stipend levels and numbers of stipends, Oakland should vigorously publicize both its new and previously existing graduate programs.

For lack of resources and competitive stipends, Oakland has generally not publicized its graduate programs. Armed with competitive stipends and high quality graduate programs, Oakland should be able to successfully compete for students at both the local and state level, and in some instances, nationally and internationally.

To support the implementation of new programs and the expansion of existing programs, the task force recommends that the university provide adequate funding

to the Office of Graduate Study for recruitment and promotional activities and to meet staffing needs resulting from the increase in enrollment.

2. Oakland should increase its library resources in those areas with graduate programs, and in particular, those areas with Ph.D. programs.

Many, if not most, academic units stated that Oakland's library resources were inadequate for their current graduate programs. Research is an integral part of graduate education and access to the literature is critical for the completion and publication of research. Thus, the development or expansion of graduate programs requires a concomitant increase in library resources.

3. Oakland should increase its efforts to attract and retain minority students.

The task force is aware that minority students are underrepresented in many graduate programs (Appendix 9). We believe that graduate students from diverse backgrounds and ethnicity enrich graduate education. In order to increase the diversity of our graduate student population, we make the following recommendations.

The mentoring program should be expanded to include the mentoring of minority graduate students. Mentors for minority students would be from the academic units in which the minority students are enrolled. Although mentors may typically be faculty, Oakland should explore the possibility of senior minority graduate students serving as mentors in certain programs. These graduate student mentors would hold assistantships in which their primary responsibility would be to serve as a mentor to less senior minority graduate students in lieu of other responsibilities. The task force's recommendation to increase stipend levels and numbers of stipends (strategic recommendation 1a) will also assist Oakland in attracting and supporting minority students.

Oakland should publicize its graduate programs in those media that specifically target minorities. Publicity in certain newspapers and radio stations that have a large minority audience would increase Oakland's visibility to qualified minorities. Oakland can also improve its visibility to minorities by participating in the various professional programs and career days in the Detroit metropolitan area. Oakland might also consider offering graduate courses at on-site locations such as Pontiac, Southfield, Detroit, and Flint.

Some academic units should explore the possibility of forming relationships with institutions that have large populations of minority students so that these institutions can serve as conduits for minority graduate students.

Finally, Oakland must strive to improve continuously its campus environment for minority students by fostering an atmosphere that is both welcoming and supportive. Such an environment may induce some of our minority undergraduates to continue their education at Oakland as graduate students.

4. For initiating new graduate programs, Oakland should focus primarily on those programs that involve collaboration between disciplines or between Oakland and other institutions. These collaborative programs should be innovative programs that do not directly compete with surrounding institutions that have superior resources.

In many cases, individual departments lack the resources, including faculty, to offer a quality graduate program. By pooling the resources of several departments, or by collaborating with other institutions such as area hospitals, schools, or industry, Oakland can offer quality graduate programs. These new collaborative graduate programs ideally would be innovative programs in growth areas where the demand for graduates is strong. By offering graduate programs in growth areas, Oakland

would be responding to a community or national need which, in turn, would facilitate student recruitment into such programs.

- (tied ranks) 5. Each Oakland graduate program should examine its clientele and its schedule of graduate course offerings to determine if it should offer more graduate courses in the evening, on Saturdays, or off-campus (including on site) to accommodate those students who have day jobs.

The task force is aware that many current Oakland graduate programs offer the bulk of their graduate courses in the evening. The results of our alumni survey indicate that a large number of potential graduate students desire evening or Saturday courses. Many of these students, particularly students in business, education, engineering, and the sciences hold full-time jobs and can attend classes only in the evening or on Saturdays. A large proportion (~ 45%) of our alumni respondents who expressed an interest in graduate education at Oakland indicated that their employer would pay for their graduate training.

- (tied ranks) 5. Budgeting, review and planning processes for graduate programs should include both the costs and the benefits associated with each program as well as assessments of the quality and distinction of each program.

The task force was surprised to find during the course of its information gathering that there are apparently no systematic procedures in place for assigning costs to each graduate program. In particular, the data on faculty FTE that are generally available include only a single figure for each department. By contrast, there is information available on credit delivery for each department that lists graduate and undergraduate credits separately. Information from the statewide HEIDI database suggests that Oakland is reporting separate undergraduate and graduate FTE figures in certain categories to this agency. Apparently this kind of information has not been

integrated into campus budget and planning processes. Current program reviews tend to focus only on assessing the quality of individual programs. The task force believes that in order to properly allocate resources to graduate programs, systematic information on the costs and benefits of individual programs should be part of the university's budget and planning processes. This information should be viewed in the context of the quality and distinction of the program, including such factors as the ability of the program to attract diverse students on a nationwide basis.

TACTICAL RECOMMENDATIONS BY THE TASK FORCE
ON GRADUATE EDUCATION

Oakland University's effort to enhance graduate education can be at least partly realized by building on the strengths of current graduate programs. This requires additional resources, and requests for additional resources in current and new programs have been identified by some units in Appendix 2. It is essential that Oakland University be committed to supporting and supplementing existing doctoral and masters' programs in order to maintain and augment the credible reputation that these programs have earned. It is also essential that Oakland University be cognizant of the lower student/faculty ratios that graduate programs require.

For the remainder of the report, we provide our tactical recommendations for developing new programs and expanding/strengthening existing programs. New programs are divided into two sections. The first includes those programs for which a formal written proposal exists. The second section includes all of the programs that were brought to the attention of the task force but which were in a lesser state of development.

1. New Programs

A. Formal proposals - (Formal proposals are ordered from the highest (1) to the lowest (3) priority. Tied proposals are assigned identically numbered priorities).

(tied
ranks)

- 1) Ph.D. in Applied Mathematical Sciences - The task force recommends the implementation of the Ph.D. in Applied Mathematical Sciences as outlined in the formal proposal for the program. The Department of Mathematical Sciences has given unanimous approval to this proposal, which has specializations in the areas of applied discrete mathematics, applied continuous mathematics, and applied statistics. Unlike traditional Ph.D.

programs in areas of pure mathematics and statistics, this program is designed to produce doctoral level mathematical scientists who are capable of investigating research problems in industry, business and government that require the creative application of advanced mathematics and statistics. Graduates of such a program will be in a position to aid local industries in their efforts to remain globally competitive by improving quality and productivity and accelerating technology transfer. The department currently has extensive partnership arrangements with Ford Motor Company in the area of applied statistics that include courses taught on-site for Ford employees, faculty consulting, a departmental computer lab, and a cooperative scholars program that supports full-time graduate students. The size and scope of these activities have brought national recognition to the department and the university.

The department has developed a sizable collection of letters of evaluation and support for the proposal from distinguished professionals in industry, government, and academe including Dr. Paul Hsieh of the Chrysler Technology Center in the Oakland Tech Park. These letters confirm that the faculty have the research strengths necessary to offer such a program and that the program meets a national and regional need that is not currently being addressed by other programs in the state.

- 1) M.S. in Physical Therapy - The task force recommends the implementation of the M.S. in Physical Therapy as outlined in the formal proposal for the program. While the entry level program in physical therapy (M.P.T.) prepares clinicians for general practice, the M.S. in Physical Therapy will prepare already licensed clinicians for specialty-practice and clinical research.

In a state with over 2,000 physical therapists and limited opportunities for graduate education in their field, the M.S. degree program has great potential. The current program in physical therapy has been offering a series of courses in orthopedic manual therapy for four years and now has a cadre of 39 individuals in these courses. Up to 30 individuals have taken courses designed for the masters program in physical therapy, and the majority are expected to continue to complete the M.S.

The M.S. degree is designed with a D.P.T. (Doctorate in Physical Therapy) as a future goal. There are approximately 40 advanced masters programs for physical therapists in the United States and 11 doctoral programs. Although the University of Michigan at Flint has an advanced masters degree program available, it is a small program that is designed as a self-directed course of study, and does not appear to satisfy the needs of the physical therapy community throughout Michigan.

Changes in health care are driving the need to improve the efficacy of therapeutic interventions and provide patient case manager alternatives. As a result, more physical therapists are seeking advanced study to both satisfy their professional goals and to provide them skills in clinical research. This degree will focus on research strategies that are most applicable in the clinical environment while developing specialty-oriented knowledge and skills.

- 3) Ph.D. in Early Childhood Education - The Department of Human Development and Child Studies has submitted a proposal for a Ph.D. in Early Childhood Education that is currently under review by the faculty in the School of Human and Educational Services. The degree focuses on the advancement of scholarship and leadership in the field of early childhood education, and consists of four foundational areas: early learning and

pedagogy; family and culture and their relation to learning; education systems and change; and human science inquiry. The department has secured letters of support from prominent educators in the State of Michigan and from nationally recognized organizations. In addition, the proposal responds to the need for improved education of our youth, a need that has been identified by the Clinton Administration. At the present time, the University of Michigan is the only Michigan institution to offer a doctoral program with an early childhood focus.

The task force has identified the current level of scholarship by program faculty as a major weakness of the proposal. Several faculty identified in the proposal are no longer employed at Oakland University and others are employed outside the Department of Human Development and Child Studies. Concern was also raised over the need for additional funding to meet the enrollment demands for the M.Ed. program and how this might impact the resources, both human and financial, required to support the doctoral program. The task force recommends that these concerns be addressed if the proposal is to advance further.

B. Informal proposals - (Informal proposals are ordered from the highest (1) to the lowest (10) priority).

1) M.A. in Training and Development - The task force recommends that the Dean of the School of Education and Human Services initiate a study to examine the feasibility of implementing an M.A. in Training and Development. Nationally, the need for training and development specialists is expected to grow faster than other occupations through the year 2,000. Of the 40 responses received from a survey of businesses in the metropolitan Detroit area, 32 (80%) have responded that they are "very interested" in

having a master's degree in training and development available to their employees. The Department of Human Resource Development is frequently contacted by employers about professional growth opportunities at Oakland for trainers in business and industry. A \$203,000 grant from the U.S. Post Office (Dearborn) will enable the department to identify problems that both management and non-management groups experience. After the needs assessment is completed, over 125 workshops will be implemented in areas such as stress management, communication enhancement, and leadership. Additionally, the program is involved in a \$24,000 grant (with a second grant being negotiated) with the Chrysler Corporation to develop 12 training and development courses for process engineers. Students and staff will work with subject matter experts to develop course outlines, objectives, prerequisites, and assessment techniques.

The history of program growth (ten percent per year), a large number of potential students, the job outlook, and the fact that there is no competition from schools within the State of Michigan argue for the development of a master's degree in Training and Development.

- 2) M.S. in Science Education - The task force recommends that the Deans of Arts and Sciences and the School of Education and Human Services appoint a joint committee of faculty from education, mathematics, and the sciences (biology, chemistry, and physics) to explore the possibility of developing an M.S. in Science Education. If the joint committee finds such a proposal feasible, the committee should submit a formal proposal to implement the new program. The joint committee should also write an external grant for securing resources to augment the new program upon its approval.

There is a critical need at the state and national level for effective science teachers (Appendix 3). Oakland has a strong education faculty, including a faculty member with a Ph.D. in Science Education, and a large number of science and mathematics faculty who are very active in research. Dr. Dawn Pickard, a specialist in science education, and a number of science faculty have expressed strong interest in developing an innovative graduate program in science education. The program would have a substantial science/mathematics component as well as courses that are team taught by science/mathematics and education faculty. Students would be required to write a thesis on a significant science/mathematics research project.

According to Dr. Dawn Pickard, there are excellent external funding opportunities available through Cranbrook, the State of Michigan, and the National Science Foundation to support graduate training in science education.

- 3) M.S. in Software Engineering - The task force recommends that the Dean of the School of Engineering and Computer Sciences initiate a study of the feasibility of implementing a master's program in software engineering. This program would develop skills in software engineering with an emphasis on the design, analysis, and management of large-scale software systems based on sound engineering principles. In addition to coursework, the program would also have a practical software project component in cooperation with local industries.

There is a growing need in industry for software engineers as computing has become closely aligned with all aspects of the engineering design process. The design, development, maintenance, and testing of software have become

as important as the traditional engineering design that produces a wide variety of products, processes, and systems.

The proposed program would be built around a number of existing graduate software courses. A few additional courses would be handled through part-time faculty until the Computer Science and Engineering (CSE) department's long standing needs for additional full-time faculty are realized. Only modest increases in computing equipment would be needed. Initial enrollment is expected to be in the range of 20 to 30 students.

- 4) Ph.D. in Computer Science - The task force recommends that the Dean of the School of Engineering and Computer Science (SECS) initiate a study of the feasibility of implementing a Ph.D. in Computer Science. Such a program would complement the existing doctoral program in systems engineering and would appeal to students in computer science. Currently, several faculty members in the Computer Science and Engineering Department (CSE) have expertise in this area.

The CSE department has previously discussed the possibility of moving in this direction. However, concerns about lack of available resources have prevented the department from developing a formal proposal. A study of the feasibility of the proposal would allow SECS to keep its options open regarding the program should additional resources become available in the future.

- 5) M.S. in Accounting - The task force recommends the development of an M.S. in accounting. There is a pending legislation in Michigan that mandates a 150 credit requirement for persons wanting professional certification in public accounting. Many of our undergraduates seek professional

certification and, therefore, we will be required to implement programs that permit our students to satisfy those requirements.

It is with this in mind that we are proposing the implementation of a Masters in Accounting program. If students are required to complete a substantial number of credits beyond an undergraduate degree, it appears reasonable to assume that students would want an advanced degree that reflects the additional training they have received.

Currently we have 193 accounting majors, the largest program in the School of Business Administration. The program has grown by 31 percent over the last five years. It is a successful program in terms of placement of graduates. Each year we place students with most of the large international accounting firms as well as with many of the regional firms. To maintain our undergraduate program as well as our reputation for quality, and to ensure that our students are eligible for certification, we need to have a suitable program in place by 1996. We believe the appropriate program is the Masters in Accounting.

- 6) Ph.D. in Administrative Sciences - The task force recommends the formation of a committee to examine the current interest and feasibility of a Ph.D. in Administrative Sciences, a proposal that was developed in 1984. The proposed Ph.D. in Administrative Sciences would be a university-wide, highly structured collaborative program involving all of the schools and the college at Oakland University. In addition to expertise in their major area, graduates of this doctoral program would have the theoretical background and practical skills in five major areas of study that contribute to administrative effectiveness within organizations: management functions, behavioral sciences, research methods, information and communications technology, and

foreign language or culture. A candidate's major area of study would be in one of the following administrative disciplines: education, health, science and research, business, management information systems, engineering, nursing, and library science.

The Ph.D. in Administrative Sciences would have a unique and innovative focus. It seeks to develop graduates who are well versed in both information (and telecommunications) technology and their administrative ("major") area of choice. Successful graduates of this program can then function as researchers studying ways to enhance the efficiency of their particular administrative systems of interest, or as administrators of such organizations.

- 7) Ph.D. in Applied Sciences - The task force recommends that the Dean of the College of Arts and Sciences and the Dean of the School of Engineering and Computer Science jointly appoint a committee to examine the feasibility of developing a Ph.D. in Applied Science. This program is designed to utilize the strong applied physics base in the Department of Physics as well as to interact with applied scientists in Michigan who are involved in research applications in the physical sciences and engineering. It will encompass the various applied aspects of such areas as surface science, condensed matter physics, magnetic materials and solid state device research, which currently are of great interest to industry. It would hopefully again lead to the same type of cooperative arrangements between Oakland faculty and local researchers that has proven to be very successful in the medical physics doctoral program.

Students would be drawn from industry and elsewhere to be trained intensively in the basic physical sciences, primarily using available graduate courses in physics, chemistry, mathematics and engineering and to do

subsequent research projects that have strong application potential in industry. It is anticipated that stipend support will be available from industry. In addition to Oakland faculty, mentors would also include scientists in industry. It is expected that this program will primarily be of interest to small businesses seeking to build a research personnel base and also to those seeking to take advantage of the new tax incentives for small business research. It would differ considerably from other doctoral programs in the physical sciences or engineering in the state of Michigan in that research problems would be defined by industry needs. A minimum of eight faculty, including four from physics that presently do not serve as advisors to medical physics students, have indicated a strong desire to participate. No new faculty would be required to initiate this program.

- 8) M.S. in Information Management - The task force recommends that the Dean of the School of Business Administration (S.B.A.) initiate a study to explore the feasibility of developing an M.S. in Information Management. The development and management of information systems is a strategically important activity in many businesses today. It is a relatively new and very rapidly changing aspect of business. Many managers trained in other functional areas of business need to be retooled in management information systems, either because they are working in MIS or because MIS is an important aspect of their current positions in another functional area of business, i.e., marketing, production, or accounting.

The objective of the Master of Science in Information Management (MSIM) degree would be to permit baccalaureate holders from majors other than MIS and computer science to pursue an education in management information systems (MIS). Such training would prepare them to serve as professional business information systems specialists or as business specialists in other

areas with expertise in MIS. Students would take all of the foundation courses, all of the required information management courses, and some of the electives.

For several years the M.B.A. at Oakland has had a special emphasis on MIS and required all M.B.A. students to take at least three MIS courses. The proposed program would allow students working in MIS related jobs to obtain more technical training in MIS than is possible in the M.B.A. program and to signal their strong interest in the MIS field. Currently, this proposal is not of the highest priority since the S.B.A. is currently involved in reaccreditation and the MIS area is involved in a joint project with Ameritech. It is anticipated that this proposal will again receive serious consideration in the 1994-95 academic year.

- 9) M.S. in Industrial Health and Safety - The task force found that the brief proposal for an M.S. in Industrial Health and Safety was not sufficiently complete to conduct a meaningful analysis of the program. A major concern about the proposal was that the proposed M.S. would have only two full-time faculty.

- 10) Law School - The task force recommends that the university not give serious consideration to establishing a law school unless substantial resources from outside the university are identified. Even if such resources are identified, the task force is concerned about a number of other issues including the need, at both the state and national level, for another law school. The task force was also concerned about the control of quality in the program should the program involve collaboration with another institution.

2. Expansion or Strengthening of Existing Programs (Proposals are ordered from the highest (1) to the lowest (7) priority.)

- 1) M.A. Counseling - The task force recommends that the M.A. in Counseling program be expanded. The counseling program has had the greatest number of graduate applications of any program on campus for the past several years and has had to turn away nearly half of the qualified candidates. Expansion of the program would allow these students to be serviced as well as enable the implementation of several post-masters' specializations (mental health counseling, career counseling, substance abuse counseling, and marriage and family counseling).

The counseling program at Oakland University provides quality academic and clinical education to prepare students to be licensed in Michigan as Licensed Professional Counselors. The program has a strong clinical component due to the opportunities at the Adult Career Counseling Center and its affiliate in Pontiac, the on-site Practicum Counseling Center, and a supervised 600 hour, field-based internship. The program provides educational experiences in both school and community counseling settings, which serves as a bridge between community mental health services and school services. Faculty are actively involved in scholarship and professional leadership as well as in student involvement in research and professional development. Significant numbers of M.S. recipients go on for the Ph.D.

- 2) M.A.T./Ph.D. in Reading - The task force recommends that the Ph.D. and M.A.T. programs in reading be strengthened by adding at least two faculty as well as additional graduate stipends.

The Ph.D. Reading Education program is a highly successful doctoral program that has achieved distinction. It is the only such doctoral program in Michigan and is

one of only a small number of Ph.D. Reading Education programs nationally. Both faculty and students are productive in scholarship. In 1987 the department was ranked among the top 12 contributors to research journals in reading. The graduates of the program are employed in tenure-track positions at Michigan universities and colleges, as K-12 teachers, consultants, and administrators. Approximately 10 of the current 30 doctoral students are minority students, the highest proportion of minority students for any graduate program at Oakland. The graduate program in reading is the largest graduate program at Oakland (Appendix 11). The masters program in reading, like the Ph.D. program, is also successful. Most of the graduate students in the master's program are practicing teachers or school administrators in Michigan.

Unfortunately, the department has a shortage of at least two faculty. No net faculty positions have been added to the program for over a decade. The current faculty are approaching the latter part of their careers, and it appears highly desirable to enhance the faculty resources at this time.

- 3) M.S. in Biology - The task force recommends that the Department of Biological Sciences and the Eye Institute collaborate more extensively in graduate training. In particular, we recommend that the Eye Institute assume a larger role in mentoring graduate students and teaching graduate courses. Presently, faculty of the Eye Institute conduct extensive research on a variety of biochemical and biological problems. This extensive scholarship and faculty expertise has tremendous potential for contributing to graduate education in biology.

The director and faculty of the Eye Institute have expressed an interest in both mentoring and teaching in the M.S. program in biology (Appendix 2). We recommend that the Department of Biological Sciences and the Eye Institute form a joint committee to examine how the Eye Institute might increase its participation

in graduate training in ways that are mutually beneficial to both the Eye Institute and the M.S. program in biology.

The task force also recommends that the M.S. program in biology increase its enrollment. The program presently contains approximately 15 students. Based on the size of the faculty (19), the number of grants (17) and grant dollars (~ \$810,000 annually), and the extensive scholarship by faculty, the biology M.S. program appears to be much smaller than resources would dictate. In addition, there appears to be high student demand for the program (Appendix 11) and graduates of the program are very successful in securing employment or entering high quality professional programs upon graduation (Appendix 2).

A major constraint on the size of the biology M.S. program is the lack of stipends. Although we recommend that Oakland provide additional stipends to biology, we believe that a large number of stipends could be supported by existing NSF, NIH, and EPA grants. Although biology has the largest grant support by far of any academic unit, it supports fewer students on grants than units with only a small fraction of its external grant support (Appendix 13). In short, the task force believes that the extensive external research funds in the Department of Biological Sciences are underutilized in graduate training.

- 4) Master of Physical Therapy - The task force recommends that the Master of Physical Therapy program be expanded. The entry level masters program awards the M.P.T. degree. At the present time Oakland supports a class size of 32. A recent grant from Providence Hospital increased the class size to 40 by supporting a faculty member and part of a secretarial position. However, this grant is for a three-year period of time after which, if the program is to maintain an increased class size, Oakland will have to provide additional resources.

The six physical therapy programs in Michigan do not meet Michigan's human resource needs for physical therapy. Despite increasing class sizes in all of these programs, there are 10 job offers for each graduate. In 1992 there were 333 pre-physical therapy students at Oakland. Given the number of students who have come to orientation sessions this year, it is speculated that there may be as many as 500 pre-physical therapy students on campus in 1993/94. It is imperative that the class size for physical therapy be expanded to accommodate more Oakland students and to meet the human resource needs in physical therapy for the state of Michigan.

The program director of physical therapy has indicated that a class size of 100 students is realistic for Oakland University if the space, staff, and faculty support are available for expansion. It is estimated that a class of 100 would require 40,000 square feet of renovated space, nine new faculty positions (including two additional positions to manage clinical placements), one AP position, and one additional secretarial position.

- 5) Ph.D. in Biomedical Sciences: Medical Physics - The task force recommends that the Ph.D. program in medical physics be strengthened. In particular, we recommend the addition of at least two faculty as well as additional graduate stipends.

The Ph.D. program in medical physics has been a very successful collaborative program with Henry Ford Hospital, Beaumont Hospital, and Sinai Hospitals. The hospitals have provided both facilities and research mentors to the program. The job market in medical physics is very strong and the graduates of Oakland's program have been successfully placed in excellent positions in both hospitals and academic institutions. The number of applicants to the medical physics doctoral program is much greater than can be accommodated.

The Department of Physics has recently lost several key faculty and anticipate losing another faculty member by 1 January 1994. In order to prevent the decline of a successful and innovative Ph.D. program, it is imperative that Oakland act quickly to provide resources, particularly faculty, to the medical physics program.

The Department of Physics has requested two additional stipends per year for the next five years to bring the total number of available stipends to 15. Approximately 15 additional stipends are expected to be provided by external grants.

- 6) M.Ed. in Early Childhood - The task force recommends the expansion of the M.Ed. in Early Childhood program by supporting the Department of Human Development and Child Studies' request for an additional faculty member. The program currently ranks third in graduate enrollment (headcount) behind the M.A.T. in Reading and the Master of Business Administration. Within the past several years, the number of qualified applicants to the program has increased substantially. Although program enrollment has also increased, the department continues to turn away qualified applicants due to limited faculty resources and classroom space. The department is attempting to offer an off-campus program in Flint to service students in the northern suburbs. Unfortunately, the lack of resources has forced the department to omit course offerings and require students to come to campus to complete their endorsement or degree programs. Without the convenience of a location in Flint, many students opt to transfer to the University of Michigan at Flint to continue their studies. The task force is aware of studies that predict increasing demand for educators in the field of early childhood education in response to federal legislation on improved health care services and educational opportunities for our nation's youth.

7) M.B.A. with Environmental Management Concentration - The task force recommends that the Dean of the School of Business Administration initiate a study to examine the feasibility of developing an M.B.A. concentration in environmental management. The proposed program calls for introducing an environmental perspective to some of the M.B.A. core courses and introducing environmental science (chemistry, biology, engineering, and physics) courses as electives in the M.B.A. program. Such an orientation would better equip candidates to understand and manage urgent environmental issues and concerns. Minimal additional expenditures are anticipated in the wake of the M.B.A. program being expanded from the current cap of 300 to 400 students. Success in this venture may lead to other collaborative concentrations in the M.B.A. involving areas such as health care management.

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