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ABSTRACT

The New York State Board of Regents statewide plan for the development of postsecondary education covers three major areas: the academic plan for postsecondary education, the review and analysis of sector master plans, and the role and functioning of the regents in postsecondary educational planning. The first section encompasses the mission of postsecondary education, strengthening collegiate education, the collegiate population to be served and the resources available, and noncollegiate postsecondary education. The second section reviews and analyzes the collegiate and noncollegiate postsecondary education master plans. The third section investigates the role of the Commissioner of Education and the State Education Department in postsecondary education. The structure of collegiate and noncollegiate postsecondary education in New York State is also reviewed. (MJM)

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EDUCATION BEYOND HIGH SCHOOL

THE REGENTS STATEWIDE PLAN FOR THE DEVELOPMENT OF POST-SECONDARY EDUCATION, 1972

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The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Albany, New York 12210
November 1972

EDUCATION BEYOND HIGH SCHOOL

THE REGENTS STATEWIDE PLAN FOR THE DEVELOPMENT OF POST-SECONDARY EDUCATION, 1972



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The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Albany, New York 12210
November 1972

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November 1, 1972

To the Governor and Legislature of the State of New York:

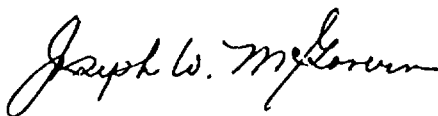
In compliance with Section 237, Subdivision 5, of the Education Law of the State of New York, I am pleased to transmit to you herewith "Education Beyond High School, The Regents Statewide Plan for the Development of Post-Secondary Education, 1972."

The master plans prepared respectively by the trustees of the State University of New York, the Board of Higher Education of the City of New York, and the Executive Board of the Commission on Independent Colleges and Universities have been reviewed and acted upon and the Regents positions on the recommendations contained therein have been incorporated in the Regents plan.

A public hearing on the content and recommendations of the Regents tentative plan was held in Albany at the State Education Department on September 29, 1972. "The Regents Statewide Plan for the Development of Post-Secondary Education, 1972" contains changes and modifications resulting from that hearing.

The Regents commend this plan and its provisions to you for careful consideration. The implementation of the policies and practices set forth will call for the continued *bipartisan* support which is a hallmark of New York State education.

Respectfully yours,



JOSEPH W. MCGOVERN
 Chancellor of the Board of Regents

Foreword

The Regents 1972 statewide plan, the third in a series produced every 4 years, is markedly different from the previous plans. The major difference is in the scope of the plan which has been expanded to encompass all aspects of education beyond high school. This more comprehensive approach to post-secondary education has led in turn to the incorporation of the review of the master plans of noncollegiate post-secondary institutions into the plan.

The area of traditional higher education or collegiate post-secondary education has also undergone expansion with the inclusion of a review of the private colleges and universities master plan as prepared by the Commission on Independent Colleges and Universities. Formerly, master plans were received only from the two public systems: the State University and The City University.

The development process also differed significantly as the Regents actively pursued their rightful role of educational leadership. This took the form of a planning bulletin which was issued to all post-secondary education institutions to guide them in developing their individual master plans. The bulletin contained the goals and the priority concerns of post-secondary education as perceived and formulated by the Regents, who, because of their responsibility for the total educational system, are in a unique position to perform the task of goal setting and problem identification. From this vantage point, the problems and issues of articulating the various types and kinds of post-secondary education into a lifelong learning process assume their proper perspective.

It is notable that in the 1972 statewide plan the Regents have gone beyond the former practice of formulating goals and have put forth specific objectives toward the achievement of these goals and have recommended courses of action to implement the objectives. This is the role of educational statesmanship: the active participation in the leadership function through concrete proposals.

The issuance of the 1972 statewide plan does not represent the end of the planning process, but rather a point on the planning con-

tinuum. It is now incumbent upon the Regents to maintain the relevance and viability of the plan by monitoring the progress made in implementing the recommendations and by amending the plan as changes in the educational climate dictate. The inherent flexibility in the planning legislation, enacted in 1961 and amended in 1971, provides the mechanisms by which the currency of the plan may be maintained. The Governor and the Legislature may take pardonable pride in this enlightened legislation.

The Regents wish to acknowledge the cooperation of the post-secondary institutions and agencies which considerably eased the task of coordinating the planning process for the complex and diverse system that is New York State post-secondary education. The Regents also wish to acknowledge the able assistance of their executive officer, the Commissioner of Education, and his higher and professional education staff.

JOSEPH W. MCGOVERN
Chancellor of the Board of Regents

Preface

The magnitude and increasing complexity of the higher education enterprise in New York State have intensified the need for coordinated planning as exemplified by the Regents statewide plans. Through these plans, which have been developed on a quadrennial basis since 1964, the Regents identify the problems and issues confronting education beyond high school and formulate policies and courses of action for their resolution.

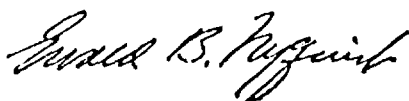
The key words describing the 1972 plan are "involvement" and "utilization." More people have been involved in the development of this plan than any preceding one. Naturally the education community has been involved, but more importantly, the general public has played a key role. Before the Regents planning bulletin was issued in 1971, a series of public hearings was held throughout the State. The purpose of these hearings was to elicit the comments of all interested parties, to better meet the needs of society, both individually and collectively, in the area of education beyond high school.

In terms of utilization, the plan underscores the necessity for optimal utilization of all post-secondary educational resources. It boldly endorses the concept that these resources include proprietary schools, industrial laboratories, and apprenticeship programs, as well as the traditional public and private institutions of higher education. Greater opportunities must be available to students to learn the skills, knowledges, and understandings in ways other than, and in addition to, the traditional forms of higher education. It is only through this type of endeavor that the continuing educational needs of the State may be met in an effective and prudent manner.

The task is immense, but not overwhelming. With all concerned parties working together in a spirit of cooperation, the Regents are confident that New York State will maintain its position of leadership and excellence in educational quality.

As Commissioner of Education, I share this confidence and commend "The Regents Statewide Plan for the Development of Post-Secondary Education 1972" to all concerned persons committed

to the expressed purposes and goals of post-secondary education. To increase the effectiveness of the planning process, comments and criticisms are invited.



EWALD B. NYQUIST
*President of The University
of the State of New York and
Commissioner of Education*

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Introduction

This is the Regents third quadrennial statewide plan for education beyond high school. It is their first plan for the development of total post-secondary education. As such, it is intended to serve as a statewide plan through the 1970's for the development and guidance of all forms of post-secondary education, both collegiate and noncollegiate.¹

The 1964 and 1968 statewide plans were concerned primarily with the expansion and development of higher education or collegiate post-secondary education. This plan goes far beyond the traditional concept of higher education. While doing so, however, it does assess the current state of affairs in traditional higher education, sets new goals, and offers guidelines for revising and strengthening this form of higher education. It also sets forth guidelines and programs for innovations in the delivery of higher education to a vast new clientele. These innovations the Regents call nontraditional collegiate post-secondary education.

In addition to higher education, the plan recognizes and provides guidelines for the development and improvement of post-secondary educational programs which are not collegiate oriented—such as proprietary, apprenticeship, industrial, and trade center programs.

The basis for the comprehensiveness of this plan is inherent in a 1969 Regents document regarding education beyond high school. At that time they said:

It is the policy of the Board of Regents that every high school graduate (or the equivalent) of the State should have an equal opportunity for post-secondary education, not limited to

¹ Collegiate post-secondary education in this document refers to all forms of education carried on under the supervision and/or administration of a formal, degree-granting institution. Noncollegiate post-secondary education refers to those forms of education which are carried on in settings outside formal degree-granting institutions, such as non-degree granting proprietary institutions, apprenticeship programs, and specialized business and industrial-sponsored settings.

two and four year degree granting institutions; the opportunity to be unrestricted by race, color, creed, sex, national origin, or economic conditions.

Every high school graduate who desires improvement in his skills, knowledge, and understandings should have the opportunity to extend his education beyond high school if he so desires.

Opportunities should be provided for all high school graduates—those who wish college level education, as well as those who seek other forms of post-secondary education.²

The Regents stressed then and reaffirm now that contemporary social and economic imperatives require an enlargement of the concept of post-secondary education. This enlarged concept requires that there be a range of programs and experiences of varying lengths and purposes available to students in college (utilizing both public and private resources), proprietary schools, industrial centers, and other educational facilities. The Regents believe that educational opportunities should be available to an individual so that he can satisfy his educational aspirations throughout his lifetime, as long as he has the aptitude, motivation, and interest to improve himself. They believe further that all forms of education which serve to enhance the dignity of man are worthy of systematic planning, development, and assessment, whether or not they lead to degrees or other formal credentials. This document sets forth and describes a wide variety of educational programs (the external degree, Empire State College, University Without Walls, open admissions, occupational and continuing education programs) available to all persons who have completed high school or the equivalent.

To direct the planning activities of all institutions and agencies toward the enlarged concept of post-secondary education, the Regents issued a publication entitled "Education Beyond High School: The Regents Planning Bulletin Concerning the Regents Statewide Plan for the Development of Higher Education, 1972." This bulletin was the Regents first direct invitation to all collegiate and noncollegiate post-secondary institutions and other agencies engaged in post-secondary activities to join them in making a total educational experience possible. The bulletin requested all institutions, as they developed both programs and long-range plans, to provide for maximum lateral and vertical mobility of students. This request was in

² "Open Admissions to Post-Secondary Education: A Statement by the Regents of The University of the State of New York," Albany, N.Y.: New York State Education Department, December 1969.

keeping with the Regents belief that credit should be given to students for what they know, regardless of how and where they learned it.

This plan, in addition to setting forth guidelines for the development of all forms of post-secondary education in New York State, contains the Regents policy statements concerning the mission and goals of post-secondary education. Also, in keeping with legal requirements, this document contains the responses of institutions and agencies to the Regents request for long-range post-secondary educational plans. The plans and programs of these institutions and agencies have been reviewed and evaluated in relation to State needs as a whole and in relation to national and international needs. The Regents policy statements and institutional plans have been incorporated to form an integral part of the Regents statewide plan for 1972.

Before the 1972 statewide plan is presented, a statement should be made about the climate in which this plan is presented.

The Regents are fully aware that the issuance of this statewide plan for the total development of post-secondary education comes at a time when resources are limited, when the State, its citizens, and its businesses and industries face serious fiscal constraints. For many public institutions merely maintaining current program levels seems almost impossible, while for others expanding operations seems improbable. This is especially true in collegiate post-secondary education. Rapidly rising costs and fiscal constraints limit planning options. Yet, the Regents believe that such a plan poses many opportunities to "put it all together" by planning for a total post-secondary experience. Notwithstanding these problems and difficulties, planning for education, by its very nature, must be forward-looking and optimistic. Education thrives on unsolved problems because it makes its greatest contribution to new knowledge by finding solutions to seemingly insurmountable problems. The Regents, therefore, present this statewide plan with assurance and confidence, despite financial constraints. They recognize the significant contribution education can and does make in meeting both individual and societal needs and the vital role of planning and coordination.

Organization and Purpose of the Plan

The Regents 1972 statewide plan has three divisions and a summary. The first division is "The Academic Plan for Post-Second-

ary Education." The second division is "The Review and Analysis of Sector Master Plans." The third division is "The Role of the Regents in Post-Secondary Educational Planning."

The content of the first division of the Regents 1972 statewide plan is intended to show clearly (a) a broadening of the scope of post-secondary education as perceived by the Regents; (b) an enunciation by the Regents of certain shifts in their emphases in the mission of post-secondary education so structured to meet the educational needs of a diverse population: the gifted, the educationally disadvantaged, minorities, women, adults, low-, middle-, and high-income groups, returning veterans, and those who want to upgrade their skills; (c) the size of the population to be served; and (d) the resources necessary to meet the educational needs.

In this division of the plan, the Regents encourage increased experimentation and assert that they will encourage and facilitate change. While respecting the objectives of traditional academic programs, the Regents call upon the academic community to reexamine traditional programs to make them more responsive to human needs. The Regents also call upon the academic community to bring about real innovation in the educational delivery system.

In calling for the development of a broader and more responsive system of post-secondary education, the Regents are mindful of the costs involved and the financial limitations under which most institutions operate. They propose a financial plan for meeting some of the fiscal needs. However, even if the full financial proposal were realized, the Regents believe that both faculty and administration will have to learn to live with and be productive in an educational climate which demands more efficient use of resources.

The Regents also express their commitment to exercise a stronger coordinating role over all post-secondary education, especially collegiate post-secondary education.

The second division of the Regents 1972 statewide plan contains Regents reviews and analyses of the master plans of both collegiate and noncollegiate post-secondary institutions of the State. The analyses of these master plans are keyed to two sets of criteria: (1) Regents formal action on the master plan recommendations made by each sector, and (2) Regents commentary on the responses made by each sector to the Regents priority concerns as contained in the 1971 planning bulletin.

The third division describes the role and function of the Re-

gents in post-secondary education, the role of the Commissioner of Education, the function of the State Education Department, and the structure of post-secondary education in the State.

A summary is made of the Regents recommendations and the Regents positions pertaining to the sector plan recommendations. This summary represents, in fact, the Regents 1972 statewide plan to guide the development and operation of the system of post-secondary education through the decade of the seventies.

Lest one view this document as fixed and unchangeable through the seventies, there is built into the State Education Law flexibility whereby institutions may petition the Regents to amend their master plan at any time, and whereby the Regents may also amend their statewide plan. All amendments to the Regents statewide plan and to the public sector plans are subject to gubernatorial approval. In 1974, a Regents progress report will be issued showing progress toward Regents and institutional objectives as well as amendments which have been made to the three sector master plans and the Regents statewide plan. In 1976, as in each subsequent 4-year period, revisions will be made to the Regents statewide plan and the master plans of institutions.

Assumptions

The social, political, economic, and cultural changes rapidly taking place in our environment demand that serious planning for education in the rest of this century be geared to the stimuli and influences that impact on the environment. This means that planning for the remainder of this century, or indeed for this decade, calls for the establishment of broad assumptions. It is obvious that projected enrollments, academic programs, financial considerations, and the body of knowledge to be learned are all influenced by these stimuli. Hence, this document attempts to identify and set forth assumptions which have bearing upon what the educated man should be like once he passes through the broad education medium.

The assumptions, therefore, upon which this document is predicated are as follows:

1. There will continue to be a need for people educated and trained at least to the level of today's college and university graduates.
2. The most feasible way to provide such education and training is through modification of the existing system and methods.

3. The educational conscience of the State's citizenry will continue to demand expanded programs of post-secondary educational opportunities for all high school graduates without regard to race, religion, sex, or economic status.
4. Students may be expected to devote approximately the same percentage of their present and future incomes to the acquisition of post-secondary education.
5. The State's citizens will continue to desire that all the educational resources of the State, whether they be public or private, be utilized for the public benefit in the most effective and economical manner possible.
6. There will be an increased need to provide instruction and educational resources in localities convenient to population centers.
7. Uniform systems for reporting academic, financial, personnel, and physical facilities data now being developed at the Federal level will be required as a condition of participation in Federal financing and, eventually, of tax exemption.
8. The 18- to 21-year-old population of the Nation will increase from 15 million in 1971 to 17 million by 1978. It will decline to 14 million by 1987 before increasing to 16 million by 2030 and leveling off at a constant birth rate.
9. There will be an increasing demand by persons of all age groups for post-secondary education; many on a discontinuous, short-term, and specific basis.
10. There will be rapid acceptance of the concept of the external degree awarded for knowledge and skills acquired by means other than formal instruction.
11. The temporary general oversupply of scientists and engineers will continue for the next several years, but a deficit will appear by the early 1980's as the new supply decreases, population increases, and requirements for technological progress increase.
12. The temporary decline in Federal financing of scientific and technological research and development will continue; then, funding will gradually increase following some restructuring of governmental agencies and clarification of national priorities.
13. The economy will continue to shift from a goods-production to a service orientation. Major postindustrial society changes in traditional relationships between business and labor will occur.
14. There will be a continued growth of 2-year colleges, primarily in the public sector at the community college level. This growth will meet the growing demands for 2 years of education beyond high school.

The First Division: The Academic Plan for Post-Secondary Education

The first division of "The Regents Statewide Plan for the Development of Post-Secondary Education, 1972" delineates the Regents perception of a system of post-secondary education to meet the future educational demands of the State.

Briefly stated, the Regents see as their highest priority the extension of educational opportunity to segments of the population not now served by the State's system of post-secondary education. This extension of opportunity requires the maintenance and maximum utilization of a comprehensive system of post-secondary education encompassing public, nonpublic, and proprietary institutions. It also calls for the establishment within that system of diverse educational opportunities to match the wide range of needs and abilities of the students seeking post-secondary education.

This wide range of requirements calls for recognition of a broad spectrum of post-secondary institutions ranging from those offering specialized vocational training to institutions offering the most advanced levels of graduate research and training. The Regents envisage diverse educational strategies extending from the traditional collegiate forms to nontraditional forms which are oriented to meet individual needs. Large components of independent study will characterize such programs; they will draw upon the broadest pattern of cultural, technical, and educational resources of the community. The range of requirements called for in this plan also demands that the post-secondary education system develop patterns of transfer between, among, and within systems so that lateral and vertical mobility is assured. This means that students must be rewarded for what they know and not for how they learned it. It means that there be easy access for students, without penalty, to any level of education

they so desire. This may come in the form of continuing education, with or without degree expectation. The system described in this plan calls for a new and enlarged opportunity for an expanded population to have full access to such forms of post-secondary education as their aptitudes and motivations demand.

To fulfill the range of requirements called for in this document, post-secondary institutions will have to participate more fully in community affairs, in helping solve community problems, and in providing leadership training to members of the community who must carry on community and civic affairs.

To provide for this range of requirements, the Regents assume that financial resources will be made available by the Legislature to support meaningful post-secondary educational programs. In addition, they emphasize that the further extension of higher educational opportunities can be achieved only if institutions are able to manage and administer their resources more carefully and more prudently in the future than they have in the past. In this plan, the Regents expect reductions in the costs of post-secondary education to be achieved primarily through better academic management of higher educational resources.

If the educational commitment for extended opportunity is to be met, the Regents expect the post-secondary system (especially the higher education community) to recognize the many paths available for the achievement of academic competence. Institutions are expected to give greater recognition to student achievement from other institutions, from independent study, and from work and cultural experiences. For their part, the Regents will extend their flexibility in encouraging and recognizing institutional efforts to experiment within their educational programs.

The extension of educational opportunity will not by itself increase accessibility of the post-secondary system to students and faculty from minority groups. The Regents demand that all institutions, but especially public institutions, develop more aggressive recruitment policies to encourage greater participation by minority populations in our higher education system. In so doing, the Regents reiterate their commitment to racial integration and give notice that they will not accept de facto academic segregation on college campuses whether it results from racial bias or from a genuine desire by college administrators to provide a more comfortable setting for minority students or to accommodate separatist ideologists.

The commitment to the pursuit of academic excellence is reiterated by the Regents, and their plan gives special recognition to several means to achieve this end: the maintenance of centers of excellence for doctoral studies; new registration arrangements to assure increased quality of undergraduate and master's offerings; plans for heightened standards for teacher preparation and other professional education; recommendations for the preservation of faculty prerogatives over academic policies outside the framework of collective negotiations; and recommendations for the retention of tenure arrangements, but under circumstances assuring continuing opportunities for new faculty appointments.

Finally, the Regents present recommendations on resource requirements to achieve the objectives set forth in their plan. A comparison of their projected enrollment needs with the enrollment goals of the State and City University systems and the nonpublic institutions in the State indicates the reality of the plan and its potential for implementation. Facility resources and needs are examined, and the Regents recommend a more intensive utilization of facilities before new construction is undertaken, especially at nonpublic institutions.

The need for new financing arrangements is clearly indicated to provide opportunities for low- and middle-income students at a reasonable cost, while minimizing the burden imposed on the taxpaying public for support of public and nonpublic higher education. The Regents assume that the public demand for post-secondary education for all its citizens is sufficient to justify a reasonably increased tax burden in support of post-secondary education.

In the remainder of this section, the Regents define the mission of post-secondary education, state long-term goals for post-secondary education, and delineate more specific objectives to be achieved through 1980.

Part I: The Mission of Post-Secondary Education

The mission of post-secondary education as seen by the Regents is twofold: (1) to provide lifelong post-secondary educational opportunities and programs for all those in the State who have the aptitude, motivation, and desire and (2) to meet the needs of society for an educated citizenry, for trained personnel, and for research and community services.

Section 1: The Regents Goals for Post-Secondary Education to A.D. 2000

In "EDUCATION BEYOND HIGH SCHOOL: The Regents Planning Bulletin Concerning the Regents Statewide Plan for the Development of Higher Education, 1972," the Regents established broad goals for post-secondary education and required that participating institutions develop their respective master plans in relation to the following goals:

1. Equalization of Educational Opportunities

Rationale:

Equalized opportunity for entry into all forms of post-secondary education for all those who are high school graduates or those possessing equivalent experience encompasses the basic principle of equality held by this Nation since its inception and reflects changing social values and enacted legislation which have attempted to clarify the concept of equality. The principal problem remaining is the elimination of economic barriers through the development of viable financial plans.

2. A Comprehensive System of Post-Secondary Education

Rationale:

A broad range of post-secondary institutions (collegiate and noncollegiate) is needed to provide sufficient programs and experiences, both in number and diversity, to span the continually evolving needs of the high school graduates of the State. The

system must provide for easy vertical and lateral mobility among the various categories of post-secondary educational opportunities throughout the adult life of each participating individual.

3. Excellence in the Pursuit of Knowledge

Rationale:

Post-secondary education, especially collegiate post-secondary education, must support an atmosphere of inquiry conducive to the systematic search for knowledge in order to ensure that the quality of post-secondary education may continually improve itself. This condition is necessary to bring the participating individual to his maximum level of development as well as to guard against educational quality erosion, which could result from the increasing size of the post-secondary enterprise.

4. Meeting the Educational Needs of Society

Rationale:

The educational needs of society must be constantly appraised and accounted for by providing opportunities for individuals to pursue studies which will qualify them for occupational endeavors necessary to meet the changing demands of a dynamic postindustrial society. This will ensure the highest level of self-realization of the individual through eventual job success and will also ensure the highest level of social betterment for the State and the Nation.

5. A System Responsive to Community Needs

Rationale:

The traditional role of the university has always included the extension of public service, but the level of involvement with the community has been progressively increasing with the advent of a new era of social responsibility. The opening up of new avenues of communication between school and neighborhood serves to foster an increased awareness of each other's goals and needs, and will result in a better understanding of the benefits to be derived from cooperative planning. Both collegiate and noncollegiate post-secondary education must therefore continue to integrate the needs of local communities with their own academic goals in order to realize any degree of social betterment resulting from the interaction of the two entities.

Section 2: The Regents Specific Objectives for Post-Secondary Education to 1980

Based on the long-range goals stated above, the Regents have

Identified some immediate objectives for all post-secondary education to work toward. They are as follows:

1. to assure that by 1980 every high school graduate (or the equivalent), having the aptitude and motivation for post-secondary education, will have the opportunity to be admitted to a program of study suited to his educational needs and that this opportunity be afforded without regard to race, creed, sex, age, national origin, or economic status
2. to develop and implement by 1980 a comprehensive system of post-secondary education, utilizing wherever feasible the principle of regionalization, to provide:
 - a. A diversity of programs designed to offer increased options to all students whatever their reasons for attending a post-secondary institution, be it
 - (1) to work toward a degree,
 - (2) to increase expertise in their chosen field,
 - (3) to take courses for self-enrichment;
 - b. Open access to post-secondary educational opportunities for people of all ages;
 - c. Flexible admissions criteria for easier entry and reentry into and among post-secondary institutions;
 - d. Maximum utilization of physical facilities and personnel resources through interinstitutional cooperation;
 - e. Consideration of the national and international implications of post-secondary education.
3. to maintain and strengthen the quality of graduate education in New York State through prudently using currently available resources, avoiding duplication and proliferation, and continually reassessing and realigning program offerings in response to the changing needs of individuals and of society
4. to encourage all post-secondary educational institutions to enlarge their commitment to, and to be more responsive to, the needs of the communities in which they exist, be they local, State, national, or worldwide
5. to insure that integration in post-secondary institutions becomes a fact in all areas, including student enrollments, faculty personnel, and residential accommodations under the auspices of the institutions
6. to develop and implement a post-secondary planning and management information system to serve the needs of the State and to be compatible with the work being carried on by the United States Office of Education through the National Center for Higher Education Management Systems at the Western Interstate Commission for Higher Education. This system would provide a realistic data base for implementation of the above objectives.

Part II: Strengthening Collegiate Education

There have been strident demands by both the public and students for changes in the collegiate educational community—changes in governance, instruction, admissions, accountability, and the relevance of what is taught to real life situations. The Regents, in 1972, believe that every institution should reexamine its offerings, its administrative procedures, the source and type of clientele for which it provides educational opportunities, and the quality of its output. Part II of the academic plan for post-secondary education, which describes the Regents' desires in collegiate education, calls upon the educational community to strengthen, to modify, to develop new options for education, and to equalize opportunities for all citizens seeking a collegiate experience. The Regents are not only calling for introspective examination of the programs and procedures of collegiate institutions, but they are serving notice that the Regents intend to examine more carefully the process of change taking place in the education community.

Within this part, section 1 describes changes which are required to enlarge the scope and strengthen the content of undergraduate programs at the 2-year and 4-year levels. Section 2 examines master's and doctoral education along with selected professional program areas and recommends changes needed to meet societal demands.

Section 1: To Strengthen Undergraduate Education

This section of the 1972 statewide plan centers on the nature and kinds of undergraduate academic programs that the post-secondary education community will offer. The academic programs proposed by the Regents fall into two categories: collegiate and noncollegiate programs. This section addresses itself to undergraduate collegiate academic programs.

Many new techniques of post-secondary education must emerge to meet the challenges of the 1970's. Unit 1 calls for teaching

changes to take place in academic offerings and describes some of the programs which must emerge. Particular attention is given to the appropriateness of academic programs for individual students; responsiveness of colleges to the needs of society; increased opportunities, methods, and time patterns for learning; and refinement of evaluation systems designed to improve the effectiveness of collegiate activities.

Unit 2 examines the 2-year college, where a major portion of the expected enrollment expansion will occur. Units 3 and 4 deal with methods of increasing student options and with the equalization of educational opportunity.

Unit 1: Change Is Called for at the Undergraduate Level

Academic offerings at institutions of higher learning need to be carefully evaluated and strengthened. In many instances, they need to be redesigned to better serve students and society as a whole. Changes in the process of education and in what constitutes a well-educated student in today's climate call for a different teaching process whereby a different kind of educated person will result. There are several reasons why this must be accomplished:

1. More students, greatly diversified in aptitude and experience, will continue to seek admission to colleges and universities; therefore, academic programs must be geared to meet their more diverse needs.
2. Students, in large numbers, have complained that much of their required work is inconsistent with their academic goals.
3. They complain that professors are so strongly committed to research that they are unmindful of student needs.
4. Society is changing the criteria used to define an "educated man."³
5. The public is demanding greater accountability for higher education expenditures.

Improved academic offerings can and must use human and financial resources more efficiently.

³ See Stephen K. Bailey and Francis J. Macy, "Regional Learning Services: A Design for Educational Liberation," Unpublished paper for the New York State Board of Regents, August 1972, pp. 11-15.

Individual Development and Social Values

The extension of collegiate education to all who wish it and can benefit from it has moved higher education from a peripheral to a central role in American society. This change carries responsibilities that go beyond preparation for careers and contribution to technological developments. One of the Regents desires is that the capacities of man for civilization be understood and applied to the experience of his changing society.

Collegiate institutions, in cooperation with schools and other social organizations, face the twin challenges of helping to prepare individuals for satisfying lives and of contributing directly to an improved quality of life.

A better understanding of the critical links between the psychological and behavioral development of individuals is especially called for. The Regents advocate a learning atmosphere that includes the following:

1. flexible and diverse curriculums that allow the individual to grow throughout life in the directions of his changing interests and to apply his humane capacities as fully as possible amid the pressures of technological change. As the manpower needs of society change, such flexibility must help the individual survive and profit from change through increased knowledge and understanding of himself and his world.
2. teaching and learning techniques and settings that will accommodate and encourage individual personalities and talent. Innovative programs are thus encouraged to meet new intellectual and occupational requirements.
3. college teachers with sufficient proficiency to guide all aspects of human development. This would indicate a need for new modes of graduate training.
4. full participation by all members of the academic community in governance, giving the student an appropriate role in the decisions that affect him.⁴
5. a physical as well as intellectual environment conducive to individual development.

⁴The second report of the Temporary Commission to Study the Causes of Campus Unrest (New York State, March 1, 1971) included a formal recommendation to college and university trustees and administrators which urged "That greater efforts be made to include faculty and students in meaningful participation in governance." (p. 108) The inference in the text of the report is that active participation by students in governance and the subsequent calmer campus climates can result only if student participation is construed by the administration as something more than a token gesture.

6. an emphasis on human studies as an area of scholarship and as a search for practical applications to contemporary life.

Recommendations

To create a flexible, open system of education which will strengthen collegiate post-secondary education in the most practical ways, the Regents recommend that colleges and universities

1. base admission on desire and need for further education, placing students in programs suited to their capacities
2. offer admissions guaranteed to be available for at least 3 years, grant leaves of absence readily, allow reentry without redtape or penalty, and minimize prerequisites and requirements of specific courses
3. introduce students to the world of work and creativity by incorporating firsthand experience of students' vocational interests in their curriculums through cooperative education, internships, independent study, and research into life situations
4. relax existing program structures so that an adult may enter or reenter formal education to achieve specific goals throughout his lifetime
5. provide educational opportunities for credit which are outside the formal campus via open universities, external degrees, and the use of a variety of educational media
6. create alternate routes to careers in the various professions which do not depend on courses and degrees
7. allow more flexible time units for the completion of both course and degree requirements so that all students are not locked into the same time frame.

To provide bases for action on many of these approaches to the humanizing of education, the Regents recommend

8. the establishment of a social services corps which would educationally tutor students in such places as inner-city schools and rural communities
9. that colleges grant academic credit and governments extend financial assistance to those who pursue collegiate post-secondary education outside formal institutions. Subsidized loans and scholar incentive awards should be established for a student's social service and for acceptable study proposals
10. commissions composed of secondary and collegiate personnel to develop better articulation between high school and collegiate levels to reduce overlap and the time required to complete educational goals be established

11. that existing regulations and guidelines be reviewed to eliminate obstacles to a more flexible system while maintaining excellence in programs.

Throughout the development of open access and flexibility in post-secondary education, there must be an acute awareness of the rigor and continuity which has been a characteristic of many of the State's high quality programs. The Regents recognize this factor and maintain that diversity of program offerings shall continue to be a mainstay of academic strength in the State.

Evaluation

The more flexible and open system of education advocated above does not suggest abolishing evaluation or accountability procedures. In fact, the necessary experimentation and diversity require even more precise judgment of student needs and educational results. Expanding enrollments, demands for reform, overproduction in some degree areas, and the scarcity of new funds for education are vivid reminders that collegiate education is accountable to the general public as well as to its students.

If a review is to be appropriate to collegiate education during the 1970's, it must become a far more sensitive, flexible, and accurate system than in the past. Reliance cannot be placed on indirect indexes of quality, including such resources as faculty credentials, student profiles, and library holdings that should produce desirable results. Instead, the results themselves must be measured. Student accomplishment might be measured in many ways, intellectual and nonintellectual. Whatever the means of evaluation, they must apply to the student's educational objectives.

Certain directions of change in educational evaluation will be pressed by the Regents during the 1970's.

1. Focus will be on outcomes rather than on indirect indexes of quality. Evaluation will be based on student, alumni, and institutional achievement that documents success in reaching stated course, program, and institutional goals.

To expand the evaluation system's concept of quality control, institutions will be expected to gather more verifiable data on the needs of their potential clientele and to study the education processes they offer. It is expected that careful attention will be paid to personal and occupational needs. Such analyses should include inventories of prospective students and a study of measurable standards for stu-

dent achievement. These analyses should look into the quality of courses and programs and the post-graduate performance and intellectual development of students. They should provide a solid base for institutional decisions.

2. Other options will be developed to test professional skills designed to complement the present reliance on credits accumulated and courses completed.
3. All constituencies—trustees, administration, faculty, students, and the public—must be heard by the governing body in thorough going examination of the educational activities of each institution wherever such hearing is appropriate, so that the human needs of all that are touched by these activities may be served.

The Regents will review the 1974 progress reports submitted by colleges and universities to appraise the changes that the institutions have effected along these lines.

Unit 2: Change Is Called for at the 2-Year College Level

In the past decade, the 2-year colleges in New York State and nationally have shown their importance, viability, and relevance in the educational spectrum. Their role in providing educational opportunity for large numbers of people who heretofore had difficulty in gaining access to post-secondary education has emphasized the value of 2-year college programs which meet the needs of people and society.

Of particular importance has been the contribution made in the field of post-secondary occupational education in which community colleges and agricultural and technical colleges have provided educational programs to train paraprofessional technicians for industry, hospitals, dentistry, and public service agencies. The range in length of programs from a few weeks to 2 years has given new opportunity to people with differing goals and desires.

For these reasons, the Regents reaffirm their commitment to the comprehensive community college concept and state again the importance of the 2-year college as a discrete entity in an educational delivery system. The Regents emphasize their position that community colleges and agricultural and technical colleges should remain 2-year institutions.

Community Colleges

In order to further improve the quality of 2-year college education during the coming decade, the Regents recommend that

12. community colleges and agricultural and technical colleges examine current practices in admissions and instruction in programs which are career-oriented at the 2-year level to increase the numbers of graduates who enter the job market
13. serious consideration be given to revising the structure for guidance, counseling, and advisement services on campuses to decentralize the services, thus increasing accessibility to students
14. community colleges be fully integrated into a regional system of public and private higher education to insure delivery of educational services to all who desire and need such services
15. occupational programs at the community colleges be more fully articulated with programs in the secondary schools and Boards of Cooperative Educational Services (BOCES) to provide a better continuum of opportunity for graduates of the secondary schools to pursue their career choice at the community college level. This should include provisions for advanced standing based on performance criteria where appropriate
16. administrative and program differentiation between the regular day programs and continuing education programs be eliminated. This should result in a "one-college" operation that allows individuals to differentiate their own pace and pattern for further education.

Agricultural and Technical Colleges

The agricultural and technical colleges are the only fully State-supported 2-year colleges in New York with residential facilities, and this should be a major consideration in determining their future role. The Regents believe that they should be used as innovative 2-year colleges. A supportive argument for using these colleges as the cutting edge for new approaches to 2-year education is their more than 50 years of institutional experience in 2-year college education.

The Regents, therefore, recommend (17) that the State University reassess the six agricultural and technical colleges. This reassessment should include the following:

1. the desirability of creating model programs of articulation within and without the State University; they may include dual enrolment, guaranteed transfer, faculty exchanges, and other appropriate techniques

2. the desirability of providing occupational offerings in fields where there is a limited demand or where the size of the expenditure for equipment and/or laboratory space makes it desirable to serve a statewide need rather than diffusing resources through a number of programs in community colleges
3. the desirability of using the agricultural and technical colleges for experimental programs in which the residential facilities can be used to provide access to students on an extended day basis. This experimentation would include experimental guidance and counseling activities, as well as programs designed to permit students admitted after the 11th grade to complete high school requirements while beginning college study in occupational programs
4. the desirability of continuing to limit enrollments in liberal arts programs to 10 percent of the student body. The Regents feel that the primary role of these colleges is to provide quality occupational education programs when they do not exist in a community college or when admission to a local community college is not possible
5. the desirability of creating an advisory council consisting of two members from each of the local college councils to better reflect the statewide mission of these agricultural and technical colleges. This group should make recommendations to the administration of the State University on the division of labor among the six agricultural and technical colleges in such matters as curriculum, employment needs, relationships with community colleges, and articulation with senior colleges.

Private Junior Colleges

New York State, in its 16 active private junior colleges, has a rich potential, which has been largely underutilized in the total picture of higher education opportunity in the State.⁵ At a time when enrollments in this segment are decreasing and costs are rising sharply, it is necessary to recast the direction in which these institutions are moving. If this sector of higher education is to continue to be viable, a number of significant changes are necessary.

⁵ See appendix H, p. 322.

Critical Issues

The attainment of the objectives outlined herein demands attention to a number of issues that may inhibit that attainment. To address these issues, both the issues themselves and the Regents concern for their resolution must be identified.

Career Education in the 2-Year Colleges

Career education at the 2-year college level is a way of education, not a kind of education. People learn in different ways. Therefore, career programs should be extended to educate a significant proportion of students in 2-year colleges. It is also important to recognize the need for paraprofessional and technical personnel in today's society and the fact that people have differing abilities, talents, and desires.

Over the past decade, the Regents have been concerned with identifying several phenomena that seem to be eroding the effectiveness of these programs. By clearly identifying some of these hindrances, it should be possible to systematically remove or overcome them.

Open Admissions and Full Opportunity

In recent years, the State and City Universities have begun to formalize a long-standing Regents policy for open door admissions. Unfortunately, it is possible to change admissions policy and practice without changing anything substantive within the institution. Since the greatest numbers of students going to colleges under these policies are in the 2-year colleges, it is important to direct particular attention to these campuses.

It is the Regents intent that open access becomes an open opportunity to succeed. This requires an internal assessment on each campus of those practices that may be working against success for students new to higher education. For example, policies pertaining to "D" grades, repeating courses, challenging courses, independent study, instructional methods, and laboratory experiences should come under most serious scrutiny to ascertain their part in helping or hindering success.

A second result of full opportunity as it is presently constituted is a potentially decreased opportunity for residents of counties not now sponsoring a community college. This is particularly significant because of the increased State share of operating budgets in the com-

munity colleges. A new system must be devised to insure equity of access for all New York high school graduates and persons beyond high school age, regardless of place of residence.

Third, the question of appropriate education for 2-year college instructors has been deferred too long. There should be greater opportunity in specialized career programs for instructional faculty. These specialists may have no formal collegiate training, but their performance record in the field accords them respect and credibility. Their contribution to career education has been and should continue to be a significant and unique enrichment of such programs. The Regents request that 2-year colleges, in their 1974 progress reports, describe what changes they have made in assessing the performance records of specialists in the field and providing for their entry into the teaching field.

Continuing Education

In fall 1970, more than 165,000 students were enrolled in community colleges in the State. This figure translates to 114,771 full-time equivalents (FTE).⁶ However, the colleges must provide more services for all the 165,000 students, even though budgets are built on FTE's. The results are usually twofold: (1) a continuing education program which is structured on a "pay-as-you-go" basis because significant increases in numbers of part-time students are not reflected by a parallel increase in FTE's and (2) a 2-year college program with little meaningful relation between the full-time program and the continuing education program.

The community college, by its name, location, and local involvement, is the institution which must have the greatest role in providing lifetime academic opportunities and educational counseling services to the members of the community.

To alleviate the situation, the Regents recommend that State University consider devising a system of budget building which uses FTE's plus a sliding scale based on unduplicated head count in continuing education programs. This would more adequately reflect the true cost of providing a good program of continuing education and educational counseling services.

⁶ "1970-71 Headcount Enrollment and Full-Time Equivalent Workload Statistics of Credit Course Students," Albany, N.Y.: State University of New York, June 1971 (Report No. 24).

⁷ Full-time equivalent enrollment is defined as full-time enrollment plus one-third of the part-time enrollment.

Urban Centers

The six urban centers created under 1966 legislation have brought meaningful post-secondary education to some urban areas in the State. To improve the viability of these institutions, the Regents recommend the following steps:

18. planning be undertaken to determine the best utilization schema for the urban centers and the cooperative college centers in the State. Particular attention should be paid to the mission, role, functions, and clientele of these institutions as well as the role played by private colleges now cosponsoring cooperative college centers and the differing conditions in various urban settings
19. expanded programs of occupational education in the urban centers be effected as soon as possible. This should result from careful planning and assessment of the needs of people, employers, and society.

The case for these kinds of preparatory education is both clear and strong: Either it is provided adequately or the State risks denying the fact of an individual's previous life experience. It is not enough to fix the blame on the secondary schools; that is an abrogation of the philosophy of these centers to move a student from where he is academically.

Financing Community Colleges

The Regents are currently studying a new system for financing higher education. It will investigate the effects of having the State assume all operating costs, eliminating the fiscal responsibility of a local sponsor. Legislation passed in 1972 now permits the local sponsor to use State bonding powers for capital construction costs. However, each community college must respond to changes in local conditions and must educate personnel needed by local employers.

Thus, any change in fiscal support will not change the need for a local board of trustees that can direct and guide the college as it responds to the needs of people living in the local area. It is probable that changes will be made in the definition of a service area of a college as a result of any new financing proposal. Representation on the community college board of trustees, however, should still reflect local participation and responsibility for program development and implementation.

In light of these new directions, the Regents recommend that legislation be enacted to accomplish the following:

20. a. the expansion of the role of the college to include the authority to administer the budget of the college once it is approved by local sponsors
- b. the reconstitution of local service areas for community colleges along lines that will more adequately reflect population densities rather than political boundaries. Pending the reconstitution of local service areas, establishment of new community colleges or multiple campuses for existing community colleges should be curtailed. The Regents are aware that forecasted demands for adequate educational services in urban areas may require that new community colleges or new campuses of existing community colleges be created by 1980
- c. the jurisdiction of The City University over the community colleges in New York City locally sponsored by the Board of Higher Education.

To assure the orderly transition to a new base for community college operation, the Regents request the State University to submit a detailed plan and proposal for the needed legislative revisions and administrative arrangements by September 1, 1973.

Unit 3: Student Options Must Be Increased

The Governor, the Legislature, the Regents, and the Commissioner of Education have been steadfast in their support of broadened educational opportunities for all New York State residents. They have encouraged all public and private institutions to provide post-secondary education to all segments of the population.

New York State institutions are presently offering new programs designed to provide collegiate post-secondary opportunities for those who have a good academic background, high motivation, and the maturity to work independently outside the traditional classroom structure. The External Degree Program, administered by the State Education Department; the Empire State College, part of the State University of New York; and City University of New York's B.A. Program offer college credit for work done off campus in nontraditional college settings.

Efforts must continue to assure access to post-secondary education for every person who desires and can profit from it. The following issues deserve attention:

1. adjusting financial assistance formulas to more nearly meet the needs of students. Such an adjustment should take into

- account the rising costs of post-secondary education and the inability of middle- and low-income people to attend college without financial support
2. recognizing that an increasing number of people are seeking post-secondary education at various times in their lives, on either a full-time or part-time basis. Provision must be made to support continuing post-secondary education programs by making financial assistance available for part-time study
 3. increasing educational opportunities for current and former prison inmates.

Options Off the Campus

Collegiate education in the United States has traditionally been reserved for those who could afford the time and money required of full-time students at a 2-year or 4-year institution of higher learning. In the past, the needs of society for higher education were more or less adequately met through elitist approaches to higher education. This situation can no longer continue to exist. An increasingly complex and technologically oriented society demands both higher levels of competence from more people and formal academic credentials which attest to such competence. During the 1960's, collegiate programs expanded enormously to meet these needs. In this inflationary era, however, society can no longer continue to provide all the financial resources necessary to fund this rate of expansion and continue to maintain quality instruction, nor is it necessary in every instance that society should do so. Alternate methods of obtaining post-secondary education are readily available and need only be tapped in a wider and more systematic fashion.

Thousands of individuals pursue independent study on the post-secondary level each year for job advancement or personal reward. They utilize the resources of libraries, proprietary schools, industrial training programs, home study materials, and evening or extension courses, while continuing to meet family or career responsibilities. All of these methods of study constitute an underused part of the educational resources of The University of the State of New York. The Regents wish to utilize these educational resources to expand educational opportunities for the independent learner.

Historically few institutions of higher learning have given credit for independent study that took place off their campuses. However, many have provided evening and extension courses, primarily for adults. Such programs have usually presupposed classroom attend-

ance, and an extensive amount of time and trouble has been required to obtain a college degree by this means. Colleges and universities have long encouraged oncampus independent study. In practice, however, the students who participate have usually been an academically select group in upper division courses.

Within the last year or two, however, the picture has changed considerably. This has resulted from student pressure and the realization that colleges should serve individuals who cannot put aside job or family responsibilities. As a result, new programs are being devised to increase student options. State University of New York's Empire State College has been set up to provide tutelage and, where necessary, formal instruction to students who proceed toward a degree while continuing their usual pursuits. This is accomplished primarily by independent study, correspondence and television courses, and other innovative means. Several participating campuses of the University Without Walls Program have opened in New York in 1971. They expose students to learning experiences away from the traditional campus setting and make use to some extent of instructors drawn from business, the arts, and numerous vocations. For 5 years, Syracuse University's Bachelor of Arts in Liberal Studies Program, geared to the working adult, has allowed individuals to move toward a college degree at their own pace. A similar program has recently been inaugurated at State University College at Brockport. At the State University at Stony Brook, a graduate program in liberal studies permits working adult students to earn an M.A. at their own pace. Each of these programs not only recognizes that valuable learning experiences take place outside of the classroom but also provides for direct participation by the student in the planning of his academic program.

The number of institutions that accept the results of proficiency examinations administered by outside agencies for credit or advanced placement has been increasing steadily. Some schools are liberalizing their degree requirements to permit students to take classwork in other institutions through consortia arrangements and interinstitutional cooperation. Nevertheless, much remains to be accomplished. Many colleges still refuse to grant full transfer credit to students who have completed work at other accredited institutions. Not enough is being done, moreover, to recognize the educational value of independent study for large number of oncampus students. In addition, few schools are promoting a "mix" of offcampus independent study,

properly validated, with more traditional on-campus classroom work. The City University of New York's B.A. Program represents a promising departure in this respect. It enables students to earn one quarter of their credits in nonclassroom work in governmental agencies, civic associations, performing arts groups, and the like.

The Regents have played a vital role in stimulating independent study both on and off campus. Since 1963, the State Education Department has sponsored the College Proficiency Examination Program. It consists of college level tests constructed by scholars from New York State institutions of post-secondary learning and normalized on resident students in college courses in the appropriate subject matter fields. Individuals who prepare themselves through self-study, job experience, or some sort of formal or informal course work take College Proficiency Examinations (CPE) and apply them for credit or advanced placement. Colleges themselves decide whether to grant or withhold credit for acceptable CPE results. Over 17,000 CPE's had been administered by the end of 1971, and over 25,000 course credits had been awarded on the basis of the examinations. In recent years, the number of CPE's administered has increased tremendously, reflecting a greater willingness on the part of institutions of higher learning to grant credit for the tests.

The success of the College Proficiency Examination Program and the lessons learned from it led directly to the establishment of the Regents External Degree Program early in 1971. Assisted by grants from the Ford Foundation and the Carnegie Corporation, the Department is developing a bachelor of science in business administration and an associate in arts degree. Funding is being sought for an associate in applied science in nursing. Committees of scholars from New York State colleges and universities set the parameters for the external degrees. Where necessary, they develop written and oral testing instruments to measure candidate proficiency. Degree requirements may be met through college transcript credit, proficiency examination results, and/or panel assessment of knowledge obtained in nontraditional ways. All testing instruments are normalized on appropriate individuals in New York institutions of higher learning, so that degrees awarded by the Board of Regents reflect academic attainment comparable to that expected of regular college graduates. The Regents conferred their first external associate in arts degrees in 1972.

The Regents will marshal all the learning resources of The

University of the State of New York—proprietary schools, independent study materials, television, libraries, traditional college classrooms—in an effort to direct the external degree candidate toward profitable self-study materials and learning experiences. The Policy Institute of the Syracuse University Research Corporation is compiling analytical listings of such college level educational resources in the five county region surrounding the city of Syracuse to inform individuals of these educational opportunities. The Regents encourage similar ventures in other regions. In addition, the Department will set up a “consumer union” to evaluate and disseminate information on self-contained independent study materials that might be of assistance to the independent learner. Each year, several hundred thousand military personnel acquire college-level knowledge through courses given by the United States Armed Forces Institute (USAFI); credits earned in this fashion may be applied to meet Regents external degree requirements.

The University of the State of New York expects to confer 62,500 Regents external degrees by 1980 in the three subject areas under development. This projection is based on the success of the CPE program, on an analysis of the growing acceptance of nontraditional collegiate study, on the wide range of off-campus learning experiences available, and on the impressive candidate interest in the Regents external degree to date. By the end of 1972, 300 associate in arts external degrees should be awarded and an additional 12,000 by the end of 1976. A total of 28,500 A.A.'s should have been earned by 1980. The Regents expect to confer 4,500 bachelor of science degrees in business administration by the end of 1976 and an additional 8,000 between 1976 and 1980. A total of 7,500 associate in applied science degrees in nursing should be granted by 1976 and another 14,000 by the end of 1980. These 62,500 Regents external degrees do not take into account other external degree programs which may be developed between now and 1980.

It is difficult to estimate the future costs of the Regents External Degree Program and the Department's College Proficiency Examination Program. Even though the Regents can predict the number of degrees to be awarded, they do not know the amount of testing the Department will have to undertake as candidates move toward external degrees. The Regents intend that the entire program be self-supporting, insofar as possible. Fees will be charged to external degree candidates in an effort to realize this policy, but candi-

dates must not be charged exorbitant rates, or one of the reasons for establishing the program will be subverted. Suffice it to say that the cost to the State to provide an equivalent amount of college-level education in traditional classroom settings would be much greater than the cost of running the CPE and external degree programs.

The Regents External Degree Program was not conceived to be in competition with traditional collegiate programs. It was designed to complement them. Few individuals will be able to obtain Regents external degrees entirely on their own. Most will have to seek formal collegiate instruction in areas of weakness. Many of these individuals may choose to remain affiliated with a campus degree program. Colleges and universities must be open and innovative enough to permit easy access to their resources and to provide entry, exit, and reentry to students moving back and forth from one appropriate learning experience to another. A college or university should be prepared to accept course transcripts compiled by the Regents, just as the State Education Department will accept college transcripts toward meeting Regents external degree requirements. The Regents External Degree Program and such new ventures as SUNY's Empire State College will increase enrollments in regular college classrooms for those schools that seize the opportunities these programs provide.

The Regents propose that the State Education Department cooperate in the establishment of a regional examining center in the northeast portion of the Nation to serve as a "credit bank" for those who have studied in whole or in part by nontraditional means. The center would evaluate college transcript and proficiency examination credit and college-related learning experiences gained through military service, VISTA, the Peace Corps, accomplishments in the arts, proprietary schools, industrial training programs, and other channels. These validating services, similar to those provided by the Council on National Academic Awards (CNAA) in Great Britain, would be carried on by faculty members selected from institutions of The University of the State of New York. Course credits obtained could be applied toward regular campus degree programs as well as toward Regents external degrees. Such a clearinghouse for college credits would increase student options for higher education and ultimately save money and time by recognizing many different types of learning experiences. It would break down existing interinstitutional barriers which impede student mobility and would involve the entire University of the State of New York in a common educational enterprise of broad significance.

As a first step toward establishing a regional examining center, the State Education Department has entered into a cooperative arrangement with the Department of Higher Education of the state of New Jersey, which established Thomas A. Edison College as an external degree-granting institution. New York will share its College Proficiency Examination Program and the Regents External Degree Program with New Jersey, which will develop and administer complementary independent study tools to be shared with New York State. This joint effort will expand educational opportunity in both states and could reduce educational costs substantially. The Regents look forward to similar cooperative ventures with other states.

Recommendations

To achieve the goal of increasing student options in collegiate education, the Regents recommend that:

21. a regional examining center be established in the northeast portion of the Nation to serve as a "credit bank" for those who have studied in whole or in part by nontraditional means
22. collegiate post-secondary institutions in the State work together and with the Regents to encourage and recognize independent learning on the post-secondary level, whether such learning takes place on their individual campuses or not
23. collegiate post-secondary institutions initiate broader programs of independent study for regularly enrolled students particularly in introductory level courses
24. public and private collegiate post-secondary institutions expand the scope and the variety of such new departures as SUNY's Empire State College and Syracuse University's Bachelor of Arts in Liberal Studies Program
25. the State support expanded offerings in the College Proficiency Examination Program to undergird the Regents external degrees and to meet pressing needs for validation of college-level independent study in crucial areas of societal concern such as police science, reading instruction, and the allied health fields
26. the State explore, evaluate, and publicize—for those who either choose to or must study on their own—the noncollegiate learning experiences available through The University of the State of New York. These include libraries, museums, proprietary schools, industrial training programs, and home study materials delivered through the various technologies, all of which constitute an unrealized part of the educational resources of the State

27. the possibilities of establishing an interstate regional examining center to evaluate post-secondary learning experiences and to award course credit for appropriate collegiate learning be explored
28. every effort be made to balance expenditures with income in the development and administration of programs to validate independent study on the collegiate level
29. counseling services in both secondary and post-secondary institutions be expanded to provide full advice concerning the options of study available to the student.

Options On the Campus

In recent years, certain developments have provided for on-campus students who may not need 4 years to complete a baccalaureate program or who may need (or want) more than 4 years of full-time study. Studies have indicated that considerable overlap exists between the material studied in the last year of high school and those in the lower division of college liberal arts programs. As a result, new interest has been generated in 3-year baccalaureate curriculums, in early admission programs for students ready for college after completing the 11th grade, and in creating "bridge" programs to combine the 12th grade with the freshman year of college.

Nationally, 18 colleges and universities are operating or plan to introduce 3-year baccalaureate programs. An additional 25 are actively studying the question of their introduction. In New York, several units of the State University, funded by the Carnegie Corporation, have begun operating 3-year baccalaureate programs. These are true 96-semester-hour programs, 3 years in duration, which attempt to minimize the overlap between high school and college. Generally, the amount of work done in the major field remains unchanged (30-40 semester hours). What is greatly reduced is the general education component of the curriculum, which averages about 30 semester hours, as compared to the 45+ semester hours frequently found in 4-year curriculums.

A second form of increasing student options on campus is represented by the new curriculum recently introduced by Hobart and William Smith Colleges. This program differs considerably from those being developed at State University units. It is divided into three parts: freshman, middle, and baccalaureate. The freshman year is taken up with freshman tutorials, bidisciplinary courses, and introductory courses. The middle years, which a student may complete in from 1 to 3 years, are composed of off-campus study, major courses,

electives, and a baccalaureate essay. The baccalaureate year consists of reading courses, seminars, major work electives, and a baccalaureate colloquium. The president of Hobart and William Smith has noted that, "To graduate in 3 years . . . [the student] needs to be well motivated and to convince the faculty that his progress is sufficient. . . ."

Early in 1972, the State Education Department revised and updated its guidelines for early admission programs, in part as an attempt to foster a reduced high school-to-college span for some students. Since the revised early admission guidelines were announced in February, 75 institutions have supplied evidence to the Department that their early admission programs conform to the guidelines.

The change in section 103.3 of the Commissioner's Regulations, authorizing the award of a high school equivalency diploma based on evidence of successful completion of a year of college study, may well increase the attraction of early admission programs for qualified high school students.

Outside New York, several institutions recently have announced plans to admit students after the 11th grade. The most notable of these is Johns Hopkins University, which expects that eventually 10 percent of its freshman class will be composed of students admitted after 3 years of high school.

The third option is a "bridge" program that permits a student to enter college after the 11th grade and complete the requirements for a high school diploma while in college.

At the State University of New York at Albany selected students at the University's campus school were accepted into the new program at the University's James E. Allen Center. During the first year of a 4-year interdisciplinary curriculum concerned with man and his institutions, students will satisfy requirements for a high school diploma while beginning lower-division study. Like the other experimental programs for shortening the high school-college time-span at State University, this program is funded in part by the Carnegie Corporation.

Introduction of 3-year baccalaureate curriculums would appear to be most appropriate at colleges with very high admissions standards. Two major arguments favor such curriculums: (1) High school programs include more advanced subjects now than they did a generation ago, and (2) today's high school seniors and college freshmen

are both more mature and more sophisticated than those of preceding generations.

These arguments depend on the ability of the secondary school to impart this more advanced knowledge to its students. Such knowledge appears to be quite limited in students below the top quarter of the high school class. Colleges without highly selective admission standards find that sizable percentages of each entering class need remedial work to prepare them for college-level study. It would be most dangerous, then, to extrapolate the effect of advanced high school curriculums on the entire high school student body from its effect on the best students in high school. Certainly, the arguments in favor of 3-year curriculums and those in favor of admitting the educationally disadvantaged to colleges would appear to be mutually exclusive. Three-year baccalaureate curriculums probably would not be successful as the norm at colleges practicing open admissions. On a statewide basis, the 3-year baccalaureate program should be seen as an alternative to the 4-year curriculum, not as a general replacement for it.

The Hobart model of a degree program in a flexible time frame—3 to 5 years—may well be a superior model to the 3-year program. Substituting a 3-year program for the present 4-year program retains the concept of fitting all students to the same institutional time frame and ignores individual differences quite as much as the 4-year curriculum does. A model that institutionalizes flexibility and does not require all students to spend the same amount of time in their education would appear to be preferable in terms of the Regents goal of humanizing the educational process.

Like the 3-year baccalaureate, early admissions programs should be regarded as an alternative to completing high school, not as a normal route to college. The early admission guidelines make it clear that such programs are designed for the superior student who is ready to undertake college work before he finishes high school. "Bridge" programs such as that at the State University at Albany would appear to fall into the same category.

Recommendations

The Regents recommend that

30. colleges consider the careful development of 3-year curricular options for qualified students in appropriate fields. Institutions contemplating 3-year baccalaureates should, however, thoroughly rethink the nature of the curriculum and

take care not to unduly imbalance the curriculum in favor of specialized work in the major

31. Institutions be encouraged to develop early admissions programs which would give full college credit for accepted achievement.

Unit 4: Educational Opportunity Must Be Equalized

The previous unit was directed toward people with high motivation for a college degree and a strong awareness of their own potential, both of which drive a person to actively seek collegiate post-secondary education. This unit is directed toward students who, if not aided and encouraged, will not go to college. These are persons who need nontraditional approaches to post-secondary education.

This unit is aimed at people age 18 to 25 who have been culturally, economically, and educationally deprived and, as a result, need special programs to prepare for and to succeed in college. The following pages (1) describe the existing populations and programs, (2) project the needs, (3) discuss anticipated problems, and (4) propose recommended courses of action.

Existing Populations and Programs

There presently are three major types of State-supported programs to aid educationally and economically disadvantaged students.

Urban Centers—There are six urban centers in the State which emphasize vocationally oriented education and training with employment or job upgrading as their main goal. Five are administered by community colleges under contracts with State University and one by an agricultural and technical college. All are fully funded by the State with no local contributions. In 1971, these urban centers enrolled over 12,300 educationally and economically disadvantaged students.

Cooperative College Centers—These are designed to provide academic remediation, tutoring, and counseling to prepare students for higher education in 2- or 4-year colleges. Presently there are eight of these centers administered by State University campuses, with cooperation from public and private colleges. In less than 2 years, 4,000 students have taken this first step toward a college degree and almost 1,500 have already transferred to a regular college program.⁸

⁸ "Higher Education Opportunity Program—Final Report 1970-71: Preliminary Report to the Regents," by the Office of Special Programs for the Disadvantaged, April 1972 (unpublished).

College Opportunity Programs—These programs provide tutorial and counseling services and financial assistance to eligible students in 2- or 4-year colleges, both public and private. In the private sector, the program is called the Higher Education Opportunity Program (HEOP) and is administered by the State Education Department. The State University program is called the Educational Opportunity Program (EOP) and is administered by the University's Office of Special Programs. The City University implements its opportunity programs under the Search for Education, Elevation and Knowledge (SFEK) program.

Funds for these programs may be used for special testing, counseling and guidance, remedial courses, special tutoring, and supplemental financial assistance which may include the cost of books, transportation, and room and board for qualified students. This program is the State's main effort toward helping students judged to be educationally, culturally, and economically disadvantaged. In fiscal year 1971-72, \$32 million was appropriated by the Legislature for over 18,300 students in these programs.

While these programs have afforded opportunity for post-secondary education to many young people, existing data indicate that opportunities are still severely limited for low- and middle-income students. Nationally, in 1970 a college-age person coming from a family with over \$15,000 income was over four times as likely to attend college as a person from a family with under \$3,000 income.⁹ Disparities also occur between races. A white college-age person is over twice as likely to enroll in college as a black college-age person.¹⁰ It is evident that much progress remains to be made.

The basic responsibility of preparing poverty students adequately for education beyond high school should not be removed from the elementary and secondary schools. Basic changes must ultimately be made in the schools during the students' formative years if there is to be an end to collegiate opportunity programs. This is not to imply that colleges will not continue to provide educational services to adults as well as to opportunity students who are identified late in their secondary school career. It does mean, however, that with the general updating of elementary and secondary schools through closer coordination with the colleges, improvement in

⁹ See appendix A, table 10, p. 277.

¹⁰ See appendix A, table 10, p. 277.

teacher and counselor training, and the revision of curriculums to meet changing needs, the major need for college opportunity programs should be significantly reduced by 1980.

Projected Needs

To insure implementation of the Regents objective of equalized educational opportunity for every high school graduate by 1980, collegiate opportunity programs for the disadvantaged must be continued. While opportunity programs are one means of increasing options for minority and disadvantaged students, they should complement other options to avoid segregation of the minority student into special programs. In 1971, collegiate opportunity programs accounted for 3.9 percent of the full-time undergraduate enrollment. By 1980, it is expected that 7 percent of the full-time undergraduate enrollment (45,000 students) will be enrolled in opportunity programs. This would include approximately 40,000 minority students or one-half of the projected minority enrollment in 1980. This enrollment level would provide for increased opportunity in a balanced manner.

In order that enrollment opportunities for low- and middle-income students continue at private institutions, the Higher Education Opportunity Program should expand to 12,000 students by 1980. Enrollment goals for 1972-75 should be set as follows:

Enrollment Goals for the Higher Education Opportunity Program

| <i>Actual</i> | | <i>Projected</i> | | |
|---------------|-------------|------------------|-------------|-------------|
| <i>1971</i> | <i>1972</i> | <i>1973</i> | <i>1974</i> | <i>1975</i> |
| 4,500 | 5,300 | 6,200 | 7,300 | 8,300 |

Problems for the 1970's

Although much has been and is being done to assure a college education for citizens of the State who require special nontraditional college programs, there are still several problem areas impeding New York State's progress toward the Regents specific objectives.¹¹ It is useful to explore some of these problem areas and assess possible ways to solve them.

Scholar incentive awards are presently allotted to these students in the same way as they are allotted to students in traditional college programs. Disadvantaged students and older part-time students are

¹¹ This document, p. 11.

generally forced either by scholastic ability or by economic necessity to take a reduced credit-hour load while attending college. Disadvantaged students progress at a slower pace because they must learn to cope scholastically. Even if they take 12 credit hours (which qualifies them as full-time students) they cannot receive scholar incentive payments for more than eight semesters which amounts to only 96 hours. This is 24 to 28 hours short of the number of credit hours generally needed for graduation at a degree-granting 4-year institution. Part-time students do not take 12 hours a semester and cannot qualify for scholar incentive payments at all, regardless of their financial position.

A solution to this problem is to award payments to disadvantaged students and part-time students on a credit-hour basis and to expand the awards to five semesters for an associate degree candidate and 10 semesters for a baccalaureate degree candidate, if that time were needed to complete a degree. This would insure that a disadvantaged student's opportunity to finish a degree would be greatly enhanced and would offer financial aid to needy part-time students wishing to complete a degree.

Although special programs are open to all economically and educationally disadvantaged students, they have resulted in the enrolling of large numbers of minority group students (blacks, Spanish-surnamed Americans, and American Indians). Administrators in some institutions have limited their recruitment efforts of minority groups to the special programs and have neglected recruiting through the standard admissions process. As a result, at some institutions it is assumed that any black, indian, or Puerto Rican is disadvantaged and in a special opportunity program. This is reinforced because few whites are recruited to these programs and the result has been de facto segregation of minority group members. The Regents in their position paper on "Minority Access to and Participation in Post-Secondary Education" have discussed this problem and its implications for integration.¹² They have requested all higher education institutions in New York State to include in their institutional plans: ". . . Plans for the enrollment of minority group students, over and above opportunity program students. . ." and data on ". . . The number of

¹² "Minority Access to and Participation in Post-Secondary Education: A Statement of Policy and Proposed Action by the Regents of The University of the State of New York," Albany, N.Y.: New York State Education Department, May 1972 (Position Paper No. 15), p. 10.

minority group students and whether they are admitted through a special program or via the regular admissions process."

There exist in New York State several populations who are unable to go where higher education is offered and for whom new approaches to college level courses must be developed. Examples of these are the rural poor, the elderly, prison inmates, prison employees, and others whose employment restricts their mobility. Educational television has brought some courses into the lives of some people, but there are other avenues as yet unexplored.

In Pennsylvania, a college level course has been initiated by Villanova University at the state's largest correctional institution, Graterford. Inside the prison, a faculty member teaches sociology for college credit to a class comprised of prisoners and prison personnel who have a high school diploma or its equivalent. More importantly, this educational opportunity enables both guards and inmates to view each other differently. In view of the events in New York State at Attica and at the Tombs in New York City, it is apparent that the need for this type of opportunity is desperate.

Add to this the elderly, the rural poor, and any other group of citizens unable to go where education is offered and it becomes apparent that education must be provided where the people who desire and can profit from it are located.

Recommendations

To assure equal opportunity for all its citizens by 1980 the Regents recommend the following:

32. article 13 of the Education Law dealing with scholar incentive awards be amended in two ways:
 - a. to assure that payments awarded to students be based on credit hours taken, to enable needy part-time students to qualify
 - b. to extend the number of semesters a student may receive scholar incentive awards from eight to 10 for a student pursuing a baccalaureate degree and from four to five for a student pursuing an associate degree
33. all higher education institutions in New York State according to their financial abilities plan to expand enrollments of minority group students, over and above opportunity program students, and to submit corroborative data to this effect
34. colleges and universities in the State consider their responsibility to those citizens of the State who are unable to go where educational services are traditionally provided (in-

cluding the rural poor, prison employees, prison inmates, and other personnel with restrictive assignments), and create programs and courses that are appropriate for and geographically available to the people.

35. enrollment in all opportunity programs expand to 45,000 in 1980 to increase opportunity for minority groups while providing balanced minority enrollments in opportunity and nonopportunity programs. The HEOP program should be expanded to 12,000 students by 1980 to insure adequate representation in the private sector.

Section 2: To Strengthen Graduate and Professional Education

Unit 1: At the Master's and Doctoral Levels

This section describes the present status of master's and doctoral education, identifies developing needs and problems that may arise, and recommends Regents policies and directions to promote an efficient approach to meeting the needs of the State. Also, because graduate students and graduate degree holders, particularly at the doctoral level, are national and international in origin and eventual place of work, national and worldwide developments affecting graduate education in New York State are considered in this section. The first part pertains to master's and doctoral education as a whole, with special attention given to the size and characteristics of the present population and to the future population to be served. Subsequently, master's and doctoral education are discussed separately with respect to their present and future status. The last part deals with conclusions and recommendations for action.

Graduate Education—Overview

Master's and doctoral degree-credit enrollment grew from almost 102,600 in 1965 to almost 148,100 in 1971, an increase of 44 percent.¹³ For the same period, undergraduate and first-professional enrollment grew 40 percent and 26 percent, respectively. The high cost of graduate education, the prospect of a decreasing availability of resources for the colleges and universities, and decreases and changes in many of the job markets for graduates demand that New York State carefully assess its responsibility in this area.

New York has historically enrolled slightly more than its "fair

¹³ See appendix A, table 11, p. 278.

share" of graduate students.¹⁴ In 1963, there was a net in-migration of 4,895 students into New York State colleges and universities.¹⁵ This net migration declined slightly to 4,192 in 1968. In both 1963 and 1968, 15 percent of the New York State residents enrolled as graduate students in institutions of higher education were outside New York State.¹⁶ Of the remaining 85 percent in both years, New York's public colleges and universities accounted for 14 percent in 1963 and 33 percent in 1968. In 1968, New York's private institutions enrolled over half of the New York State residents engaged in graduate education and over 86 percent of the "out-of-state" graduate students going to school in New York State.¹⁷ Although it is evident that New York State has historically maintained its "fair share" of graduate education largely through efforts of the private institutions in New York State, recent trends show that the public sector is assuming a growing proportion of overall graduate education.

A second observation concerning the present status of graduate education in New York concerns the enrollment growth relative to the population. While graduate enrollment grew 38 percent from 1965 to 1970, it can be seen from figure 1 that the 22-35 age population in New York grew from 2.63 million to 2.84 million, an increase of 8 percent. Thus, the growth of graduate education is due only in small part to increased population with the major portion due to increased participation of the population. While the 1965-70 period was characterized by a relatively small 22-35 age population growth, the decade of the 1970's will see a large population increase. Figure 1 shows the projected 22-35 age population growth from the 1970 level of 2.84 million to the 1980 level of 4.05 million, an increase of almost 1.2 million or 42 percent. In terms of absolute numbers, the 1970-80 increase is projected to be more than five times as large as the 1965-70 increase. With this large surge in population and with an increasing college-going rate at the undergraduate level, it is likely that there will be a marked increase in the demand for graduate education.

Concurrently, with this anticipated increase in demand for graduate education, there must also be considered the future employ-

¹⁴ For the purposes of this unit, graduate education is defined as master's or doctoral education, excluding selected first-professional fields.

¹⁵ See appendix A, table 12, p. 278.

¹⁶ See appendix A, table 13, p. 279.

¹⁷ See appendix A, table 13, p. 279, and table 14, p. 280.

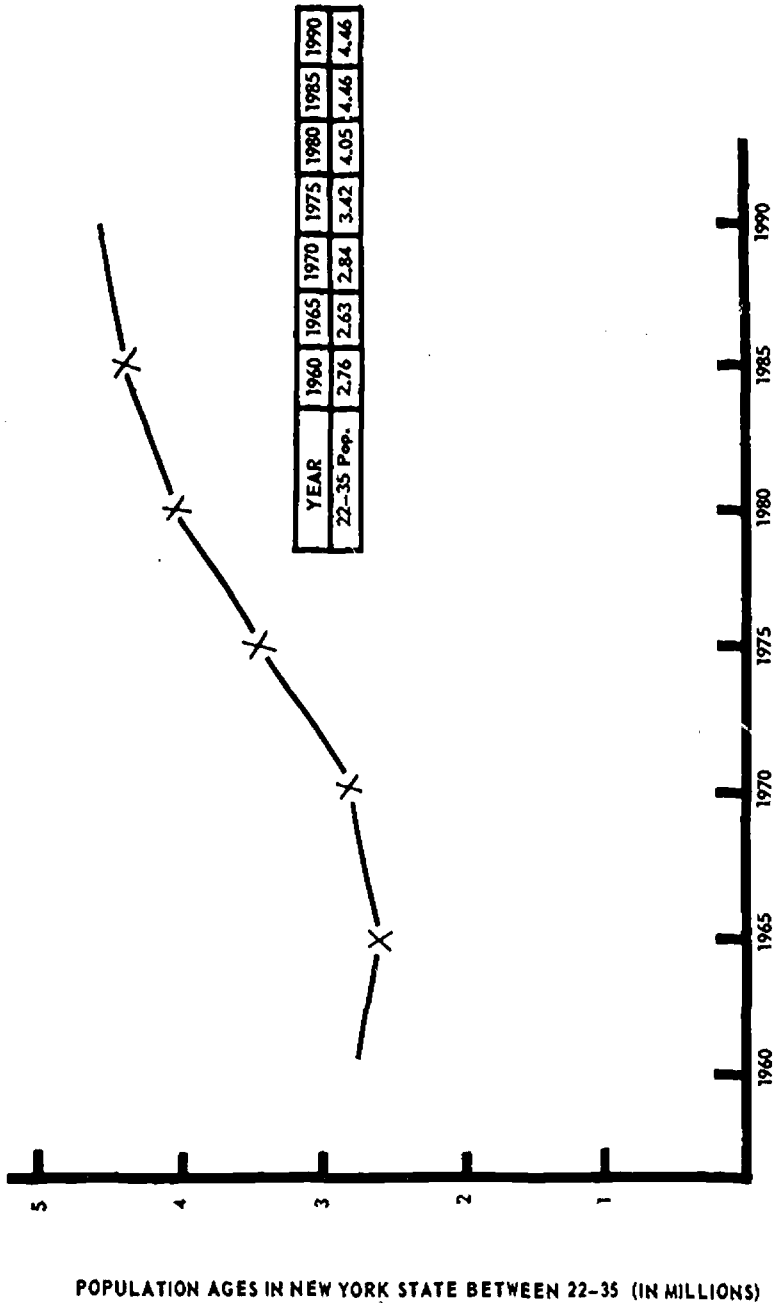


FIGURE 1, POPULATION AGES IN NEW YORK STATE BETWEEN 22-35, 1960-1990 (IN MILLIONS)

ment opportunities for graduate degree holders when planning for graduate programs. Admittedly, it is extremely difficult to predict job markets outside of academe with even a moderate degree of confidence. Ideally, it would be best to provide all the educational alternatives students want, and leave career choice decisions to them. At a time of constrained resources, however, priorities must be established among the many proposed programs. One important factor to consider is whether or not students completing one program are more likely to find a job than those completing another.

Master's Education

Present Status—The Rules of the Regents (section 3.47) categorize master's degree programs into two distinct types. Academic degree programs, the first type, are those designed to contribute to the knowledge of the subject matter and to emphasize theory. Professional degree programs, the second type, are designed to prepare a person for professional practice and are generally terminal in nature.

The largest professional program is the teacher education master's. In 1965-66, the number of master's degrees awarded in education was 6,144 or 32 percent of the master's degrees awarded in the State. By 1969-70, the number had increased to 10,427 or 39 percent of all master's degrees.¹⁸ Another example of the professional master's is in the business and commerce field. These degrees increased from 1,704 in 1965-66 to 2,844 in 1969-70. These two disciplines accounted for nearly half of the master's degrees awarded in the State in 1969-70 and have been largely responsible for the growth in the overall number of master's degrees.

The primary impetus for the growth in education master's degrees has been the 1966 State requirement of 30 graduate credits or a master's degree for permanent certification. A secondary factor contributing to the demand for professional master's programs is the necessity for retraining and for the updating of skills.

Because of the shift in the emphasis on the type of master's education demanded, the growth of programs in the State has been undisciplined. Many institutions have attempted to satisfy a student clientele with widely differing goals with a single program. A State Education Department study of 56 of the 82 institutions offering master's degrees found a lack of consistency from program to pro-

¹⁸ See appendix A, table 15, p. 280.

gram, widely differing admissions standards, and unnecessary duplication of programs among many institutions.¹⁹

Future Status—With the prospect of an increased population to be served in the 1970's, the growing demand for master's education is likely to continue. A factor holding down this growth will be the planned change in the State certification requirements for teachers. As certification requirements are shifted to focus on actual teacher performance, it is planned that the requirement for the master's degree or 30 graduate credits will no longer be necessary for permanent certification.²⁰ The result of this change is expected to be a decline in the growth of teacher education programs at the master's level. This effect will most likely be diluted to some extent as credentials are more actively sought in an increasingly competitive labor market. However, part-time master's degree credit enrollment in education may decrease significantly from the 1970 enrollment of more than 29,000 students as the certification requirements are altered.

The demand for the professional master's program in other areas is expected to continue to grow as our technological society becomes more specialized. It is also expected that there will be a continuing demand for the more traditional academic programs, especially in the social sciences, which reflect current issues and humanitarian concepts. A detailed analysis must be made to determine the extent to which existing programs serve the two differing demands in order to strengthen the quality of master's education in New York.

Doctoral Education

Present Status—After 25 years of marked growth, the graduate schools of the State and Nation find themselves beset by difficulties. Slackening financial support for programs and employment problems for graduates are the foremost problems.

Underlying these specific problems, however, are more general ones implicit in the following critical questions currently being raised: To what degree should a doctoral program specifically prepare a student for professional practice, teaching, or research? To what degree should the size of a doctoral program be governed by projected employment demands for graduates, by potential enroll-

¹⁹ "Master's Degrees in the State of New York, 1969-70," Albany, N.Y.: New York State Education Department, 1972.

²⁰ See pp. 47-56 for certification discussion.

ment demand, and by university requirements for research and teaching activities? How should doctoral programs respond to the increasing demands that they relate their research activities more directly to particular societal problems? What balance should the research programs strike between fundamental and applied research? Should new doctoral programs be undertaken in fields where established programs at other universities are operating below capacity? To what extent should all programs, public and private, be coordinated to achieve new gains on a statewide basis in effectiveness, quality, economy, and efficiency?

The production of doctoral degrees has more than adequately met the State's needs, growing from 1,443 in 1960 to 3,285 in 1970.²¹ The problem that does loom, if present trends continue, is serious unemployment and underemployment with no promise of relief for the future. This difficulty is both statewide and national in scope. It finds its origins in a number of sources, foremost of which is the slackening demand for college faculty. Although historically over 60 percent of the doctorates were finding employment in colleges and universities, it has been estimated that fewer than 25 percent will be employed there in the next two decades.²² It has also been projected that there will be fewer actual positions available as the expansion of higher education institutions tapers off. Another important factor contributing to the apparent surplus of doctorates is the diminution of Federal support for research and development. The commitment of the government to encourage growth in the natural sciences and in engineering has slackened in recent years as priorities on the national level have shifted. In addition, support of research and development by industry has slackened recently.

In considering the question of how directive doctoral education should be in preparing students for their future roles, a recent study²³ reveals interesting information. Holders of doctoral degrees are employed, as is well known, in many different capacities in the academic and nonacademic (e.g., government, industry, foundations) sectors where the type of work they undertake includes research, development, teaching, management, and administration. It should be

²¹ See appendix A, table 16, p. 281.

²² A. M. Carter, "Scientific Manpower for 1970-85," *Science*, vol. 172, 1971.

²³ See appendix A, table 17, p. 282.

noted that 40 percent of the degree holders employed in the academic sector, excluding the fields of education and the humanities, are engaged primarily in undergraduate activities, where teaching responsibilities are dominant. It is estimated that over 85 percent of the humanities doctorates are in academic positions, with about two-thirds in undergraduate programs. The corresponding figure for education is about 60 percent, with over half in undergraduate programs. The importance for doctorates educated in these fields to know how to teach is quite apparent.

Considering the fact that there are approximately 1,400 registered doctoral programs in all of the State's universities, an average of two doctorates per program were graduated in 1970. Since some programs produced large numbers of graduates each year, others must have graduated only one or even none.

Future Status—The most important needs for the future of doctoral education in New York State are as follows:

1. to maintain and develop, where necessary, high quality programs of research and instruction and to provide for programs in all necessary fields, both conventional and multidisciplinary

2. to put into reasonable balance the future supply and use of doctorates, and to provide the kind of education most appropriate to students' future employment needs

3. to relate programs, to a greater extent, to societal needs, to requirements for health care, environmental control, education, government service, and to the general quality of life

4. to coordinate and integrate programs at different institutions to improve the quality of instruction and research, while efficiently and economically utilizing all available resources throughout the State.

In consideration of these needs, there was established, early in 1972, a New York State Board of Regents Commission on Doctoral Education. The commission has been charged with recommending to the Regents guidelines for establishing policy to guide the development of doctoral education in the State. Their report is scheduled to be submitted early in 1973.

Preliminary discussion has indicated that guidelines will be embracing the following principles:

1. New York's institutions should offer doctoral programs only in those fields in which they have the interest, strength, and resources to sustain high quality offerings whether in basic or applied

research or training for professional practice. Since doctoral programs are national in scope, it is not essential that any single state have a "complete" set of all of them.

2. Doctoral programs should be offered only where and when criteria in the following areas can be satisfied: (1) strength of faculty; (2) financial resources; (3) laboratory, library, and other physical facilities; (4) quality of students; (5) size and quality of programs; (6) demonstrated need for graduates; and (7) related and supportive programs at the institution or its affiliates.

3. Facilities, faculties, and resources for doctoral education in the public and private institutions should be utilized. They should be coordinated wherever appropriate on regional (intrastate), statewide, and interstate bases to achieve the greatest efficiency and highest quality for the State as a whole.

4. Special efforts should be made by the universities to assist qualified minority and women students to undertake doctoral and professional studies.

5. The Regents should consider establishing a council for implementing these recommendations which will assure the participating universities of adequate representation. The Department should minimize bureaucratic controls by simplifying its registration procedures for reaching expeditious and objective decisions with respect to new program offerings. The Department should concentrate its efforts on assessing institutional strengths in major areas of doctoral studies leaving to the institutions decisions with respect to specific program arrangements.

Recommendations

Pertaining to master's and doctoral education, the Regents recommend that

36. all currently authorized master's programs be reviewed
37. institutions withdraw those programs which, upon evaluation, prove to be (a) inactive or underenrolled; (b) of marginal quality and which cannot be strengthened by sharing resources with other institutions; and (c) below the minimum standards set by Commissioner's Regulations
38. additional institutions not offer master's programs unless the circumstances are most unusual or the program is a cooperative venture. Those institutions already authorized to offer master's programs should (a) define the primary objectives of current or new programs, (b) make explicit the practices which will enable students to achieve them,

- and (c) periodically verify the need for these programs
39. wherever possible, the purposes of professional certification and licensing be separated from those of general master's degrees. A master's program which is required as part of professional certification requirements or which serves as an introductory level for a higher degree should be a detachable program with goals and an integrity of its own
 40. academic advising facilities be equally available to all categories of master's students, whether they attend college in the day or evening, in summer or regular sessions, are part-time or full-time students, or whether they are matriculated or nonmatriculated students
 41. institutions find appropriate ways to evaluate their efforts in master's education through followup studies of graduates' continuing education and career development, analysis of reasons for students' withdrawal from programs, testing of graduates, investigation of intangible factors, visits by external reviewers, and joint reviews with employers of the effectiveness of their graduates' education.

Unit 2: In the Preparation and Practice of Professionals for Elementary and Secondary Education

The impact of the professional staff of the public schools on the State and its citizens is of considerable significance. That staff affects generations of citizens in their most formative years, and almost all of the State's population is affected thereby. The importance of the teaching population is highlighted by the fact that approximately three-quarters of a school district's operating budget is directly related to the support of the professional staff. The Fleischmann Commission²⁴ wisely recommends that enrollment in teacher preparation itself be regulated to avoid aggravating the condition of oversupply.

The Present Situation

The mandatory requirement of a baccalaureate degree for elementary school teachers, special subject teachers, and teachers of academic subjects was established in 1936. In 1943, the fifth-year requirement was enacted for teachers of academic and special subjects. In 1963, this requirement was extended to elementary school teachers.

²⁴ The New York State Commission on the Quality, Cost, and Financing of Elementary and Secondary Education.

These three key dates represent major modifications in New York's system of preparing most public school teachers, although the same basic approach to teacher preparation continued. Course work, including student teaching, led to a baccalaureate degree. In addition, 30 semester hours of graduate study were required.

The State Education Department accredits collegiate programs and it has done so in the traditional fashion. It has looked at training and experience of the staff, the appropriateness of the curriculum in light of the certificate to be issued, admission and grading practices, and physical facilities to support the program. The Department, like the colleges themselves, has been unable to determine how well preparatory programs are meeting the needs of schools. In other words, no one has been able to state with assurance that the teachers who are certified can produce specified learning gains in the pupils they are to teach.

That teacher education, certification, and practice must be reformed is an accepted fact. Certification must guarantee to the public that those who aspire to the teaching profession possess demonstrated competence in teaching. Teacher education, therefore, must prepare aspirants so that they can demonstrate competence.

Goal for Teacher Preparation and Certification

Certain underlying convictions exist about teacher preparation; they illuminate objectives of plans later outlined.

1. Pupil performance should be the underlying basis for judging teacher competence. This conviction is also reflected in the Fleischmann Commission recommendation that the promotion of teachers be based on output. (Measures of pupil performance are inadequate at present and teacher competencies have not been identified so judging teacher competence fully on the basis of pupil performance is not now possible.)

2. The basis for certification should be teacher competence rather than total reliance on college courses. Possession of a State certificate should represent an acceptable level of competence in general background knowledge, subject matter knowledge, and teaching skill.

3. The preparation of teachers should involve a number of pertinent agencies and individuals, including schools, higher institutions, professional staffs, and relevant agencies. The ideal professional training would integrate theoretical understanding and clinical experience in a system of mutual correction and reinforcement.

4. The demands of teaching require that professional personnel undergo continuous training; consequently, teachers should be expected to demonstrate competency periodically to maintain certification.

5. The separation of preparation, certification, and employment must be maintained. In other words, neither the teacher education institutions nor the employer should certify the teacher.

6. Efficient use of staff talents and organizational flexibility can be accomplished by differentiating the roles and functions of staff members including the use of paraprofessional personnel. It becomes necessary, therefore, that there be training programs for auxiliary personnel appropriate to and coordinated with programs to prepare teachers so that the instructional team effort can be most rewarding for pupils.

The Regents goal for the preparation and practice of professional personnel in the schools is *to establish a system of certification by which the State can assure the public that professional personnel in the schools possess and maintain demonstrated competence to enable children to learn.*

With this goal, the Regents present the broad outlines of a plan to implement an improved system of teacher certification. A timetable has been developed to illustrate the action that is planned (table 1).

Implementing Needed Change

Since 1967, significant study has been given to a performance-based program of teacher education, certification, and practice. The first real evidence of progress took place when the Regents sanctioned 12 trial projects in 1971.

These trial projects—initial attempts at a performance-based, field-centered approach to teacher education and certification—are the culmination of 5 years of discussion, conceptualization, and broadened understanding. Trial projects involve schools, colleges, professional staff, and teachers in training. Schools must identify their objectives, the competencies that are influential, and the training programs to develop those competencies. These projects go beyond the Fleischmann Commission recommendations to reduce the number of education courses in that they eliminate course-counting itself and concentrate attention on the prospective teacher's ability to bring about predictable accomplishment on the part of pupils.

Table 1. Developmental Plans for Preparing Professionals for Elementary and Secondary Education

| Proposed Time Line | 1972 | 1973 | 1975 | 1976 | 1977 | 1980 | 1990 |
|---------------------|---|---|--|--|---|---|---|
| Accreditation | | All new programs to strive to achieve Regents goal. Registration of existing programs based on potential for achieving Regents goal. | | | | All programs to achieve Regents goal. | |
| Certification | Begin review of comprehensive assessment techniques. Establishment of potential alternatives to permanent certification. | | Certification by assessment available (limited) for nonprogram people. | Assess potential of comprehensive assessment techniques. Major assessment of trial project potential. | | Certification for program personnel only on competency. Certification for nonprogram personnel only on recommendation of ICP. Elimination of permanent certificate and establishment of periodic assessment for newly certified on basis of competence. | Periodic assessment on basis of pupil performance, to consider specific situations. |
| Continued Education | Establishment of opportunities for continued education. | | | Assess potential of continued education opportunities. | Seek legal basis for continued education. | Ensure opportunities for maintaining competence. | |

The term "performance-based teacher education" is used in many different ways, but it is here used in a particular way. Teacher education is construed as performance-based if the competencies (knowledge, skills, behaviors) to be demonstrated by the potential teacher are explicit, measurable, and public; if the criteria to be employed in assessing competencies are explicit and public; and if the assessment of the potential teacher's competencies uses his performance as the primary source of evidence and if it is objective. It is also imperative that the potential teacher's rate of progress through the teacher education program be determined by demonstrated competency and that the program facilitate the learning of the competencies.

"Field-centered" is another term with many meanings, but as used here it means that most, but not necessarily all, teacher education be conducted in schools or other educational agencies in the community. Field-centered preparation may include simulation, games, and other methods that are reality-related to develop particular desirable behaviors in the prospective teacher.

The trial project model is an incomplete one. Each project is working in a few certification areas at most, but the projects are an important and significant step in the development of a more complete teacher preparation and certification system which will cover all areas of certification and will address preparation for entry into school service and, in addition, provide for maintenance of competency.

Between 1972 and 1976, the trial projects are expected to mature and serve as resources to develop a more complete reform of teacher preparation and practice. The trial projects should lead to a more comprehensive approach to shared responsibility for a performance-based, field-centered approach to prepare all levels of school personnel; i.e., teachers, paraprofessionals, administrators, and supervisors in support of the Regent's goal and objectives. The Department staff has been organized to monitor, evaluate, and support the trial projects. Information and data gathered by the development of the projects will be made widely available.

Accreditation of Teacher Preparation Programs—The procedures now used to accredit teacher education programs provide helpful information about the organization and operation of the preparatory program. However, they do not provide significant data on program quality, especially as it relates to the capabilities of students who complete the program.

As accreditation procedures are improved, the focus for determining a program's potential and, hence, whether it should receive initial approval will center on answers to the following questions:

1. What competencies and attitudes should the student demonstrate at the completion of the program?
2. What evidence will be acceptable to demonstrate that the competencies and attitudes desired have been achieved?
3. What contribution to the teacher education program will be made by the university, the school district, the bargaining agent, and others?
4. What steps are being taken to introduce the concept of demonstration of competencies in relevant components of the nonprofessional-education portion of teacher education programs?

Once the program is operating, the Department will require a second stage of accreditation (registration) and it will focus on answers to these two questions:

1. What evidence is available to demonstrate that graduates have achieved the desired competencies and attitudes?
2. What evidence is available to indicate that the desired competencies and attitudes are appropriate?

The institution of the reform in accreditation will take place in three stages. First, all *new* programs proposed for initial approval after September 1, 1973, will need to show that they are designed so as to achieve the Regents goal for teacher education.²⁵ Performance-based and field-centered teacher education is recognized as a most promising approach. Variations or alternatives which demonstrate achievement of the Regents goal and also reflect the convictions underlying this goal will also be carefully considered. It will be desirable to show that there has been a significant functional involvement in program development by representatives of higher institutions, including the faculty of education, school districts, teachers, and other appropriate groups.

Second, programs seeking "registration" (the second step of the accreditation process) will also be required to demonstrate that they can achieve the Regents goal. Higher institution, school district, and

²⁵ The dates in unit 2 are intended as checkpoints for review of progress in the total effort. The dates are used to set the direction of State activity and represent the best estimate of the elapsed time required to undertake the essential research, development, and implementation.

professional staff involvement will need to extend beyond development to include implementation and evaluation. It is expected that all preparatory programs will be operating so that the Regents goal can be achieved no later than 1980.

Third, beginning no later than 1985 the Department's accreditation focus should be primarily on the performance criteria necessary for certification and the means used to assess the criteria.

Certification—Expansion of the Opportunities for Meeting Permanent Certification Requirements—The efforts noted under "Accreditation of Teacher Preparation Programs" will apply to the acquisition of both provisional and permanent certification. Opportunities to acquire permanent certification should be expanded. Expansion efforts will be aimed at the improvement of professional service, not merely on graduate study per se. Specific activities are planned:

1. the acceptance of approved examinations, such as the College Proficiency Examinations, as college credit toward required graduate study. These examinations are now used to waive a specific course requirement, but the candidates must complete an equivalent amount of graduate credit.
2. the development of an external master's degree in education which will grant credit for knowledge gained through inservice work, graduate study, life experience, etc. validated by appropriate assessment procedures.
3. the launching of pilot efforts to allow provisionally certified teachers to acquire permanent certification in ways directly related to improving their professional service. Such pilot efforts might be encouraged within such units as a large school district, a BOCES area, or a regional planning center.

In line with the target dates identified under "Accreditation" above, the Department will not accept applications for individual evaluations after September 1, 1980. All persons seeking certification will have to be certified on the basis of an assessment of their competence. This will take place in a State-monitored system of performance assessment centers in which those desiring certification will have to demonstrate their competence to professionals. Such centers may be maintained by universities, schools, or other approved agencies. The centers will employ a variety of assessment methods such as simulation, micro-experiences, demonstration, and expert panel review, in addition to traditional paper and pencil tests. These meth-

ods, as well as the State Education Department's criteria of assessment and the work being done in the establishment of the Regents External Degree Program, should be carefully studied and evaluated at intermittent intervals by special Regents panels drawn from university faculties, school practitioners, and distinguished lay persons.

Maintaining Certification—Two additional major changes should take place in 1980. In meeting the goal that requires certificate holders to maintain demonstrated competence to enable children to learn, it is proposed that (1) the State will cease to issue permanent certificates and (2) the State will impose a periodic assessment on persons certified after September 1, 1980. The Fleischmann Commission report also contemplates that teachers would be assessed periodically to insure that the needs of students are being met.

This step in the achievement of the goal should be fully realized after 1990. At that time staff behaviors that positively affect pupil performance will have been validated and should become the focus for the periodic assessment requirement. Until then periodic assessment, which will take place in the performance assessment centers, will be on those staff behaviors which by tradition and logic are viewed as important.

Continuing Education—Beginning September 1, 1980, opportunities should be available for all staff to maintain demonstrated competence in their area of certification. There is strong support for the Fleischmann Commission position stressing the importance of greater emphasis on inservice education and recommending specific plans therefor.

During 1972-77, the Department will study ways to develop and implement a continuing education system. The Department will assess efforts presently existing in the State, encourage some existing and/or new efforts, develop and discuss the merits of possible models, and prepare appropriate documentation to establish a statewide system of continuing education for teachers. One possible model would be the career development center. A second model is that of teacher centers. The teacher center model and other possible models may well form a significant part of a State system of continuing education for teachers. Professional and lighthouse schools recommended by the Fleischmann Commission report are additional models that may effectively support the continuing education of teachers.

Some of the important characteristics of the career development center are as follows:

1. being located within a stated geographic area
2. possessing the potential for multiagency involvement of schools, colleges, professional associations, museums, libraries, and other pertinent agencies
3. cataloging resources
4. marshaling resources
5. maintaining cooperative relationships with other regional functions
6. being responsible to the State
7. being supported by public funds, fees, and other sources.

The career development centers might be designed and governed in different ways but with the single purpose of responding to the needs of school staff. One common arrangement would entail cooperative planning and implementation by representatives of several agencies, including public school teachers and administrators and college staffs. A permanent leadership staff would manage the center and report to the cooperative governing board.

A second model, which could be incorporated within a system of career development centers or which might operate independently, is the teacher center. These would be similar to teacher centers operating in Great Britain under the aegis of the Schools Council. Teacher centers would be established, governed, and operated exclusively by teachers who would match the available resources with their own learning needs.

In the development of a statewide system of continuing education for teachers, it might be appropriate for half of the units involved to follow the teacher center model.

Implications of the Plan

Some far-reaching implications of this plan are as follows:

1. a visible and determined effort to assure that the preparation of professional personnel has a direct relationship to acceptable performance standards
2. the identification and implementation of mechanisms to identify persons who have the potential to become professional staff members
3. an expansion of ways by which training can be accomplished to satisfy the stated competencies from formal course work to independent and nondirected study
4. a move away from requiring only graduate study for per-

- manent certification. This will serve to reduce the number and scope of graduate degree programs in education
5. the use of personnel with varying levels of competencies in the elementary and secondary schools. School districts and their professional staffs will need to study the present roles and responsibilities of their staffs to accommodate these variations and to participate actively in the training of personnel to carry out the schools' objectives.

Specific Conclusions

1. The Regents support the need to reform the preparation and practice of teachers in the elementary and secondary schools.
2. The Regents declare that the need to base certification on demonstrated competence is imperative and must be met in the shortest possible time period.
3. The Regents direct the Department to accept the task of working toward the necessary reform as one of the highest priority. All potential avenues that might help to meet the Regents goal should be explored.
4. The Regents realize the cost of developing the knowledge and technology necessary for the reform of teacher education. They, therefore, direct the Department to construct a plan for the most efficient and economical use of the State's resources, a plan that will allocate pieces of the development task to several agencies and also provide for the coordination of all efforts.

Unit 3: In Engineering Education

Engineering education has been singled out for attention in this plan, first, because engineering meets one of New York State's important manpower needs and, second, because the private engineering schools in the State are in grave financial difficulty.

Engineering has played a large role in the development of our country. Indeed, the first public institutions of higher education were established primarily for engineering and related instruction. The increased emphasis on technology in all aspects of our daily life will bring about increased need for people with expertise in a variety of engineering activities. Care must be taken to assure that those engineering services required by New York State will be met with capable, well-trained, and versatile personnel.

This unit (1) describes the current status of engineering in New York State, (2) projects the needs for future engineering personnel, (3) identifies and discusses a number of pertinent problems unique to engineering education in New York State, and discusses options designed to assure engineering expertise through 1980, and (4) recommends programs and courses of action to which all sectors of society—the community, industry, colleges and universities, and engineers themselves—can be jointly involved to assure the engineering manpower New York State will need in the decade ahead.

Current Status

While New York State undergraduate enrollments in most fields of study rose during the last quadrennium, enrollments in engineering programs have remained relatively stable. More significantly, freshman enrollments in nonpublic engineering schools have declined by 10-15 percent in each of the last 2 years, and this trend is likely to continue during the next several years. Enrollments at public 2-year college technical programs, meanwhile, have increased only 6 percent between 1968 and 1971 despite major enrollment increases at the State's community colleges. As a result, the number of students transferring to the upper division level has not been significant. In addition, both master's and doctoral enrollments in engineering have declined significantly from the 1969 high of almost 9,500 students to about 5,500 in 1971.

As a result of this enrollment stability in undergraduate programs, almost all of the engineering schools in the State report "unused capacity" ranging from 10-50 percent of current enrollments; i.e., enrollments can be expanded significantly with no increase in facilities or faculty. Because of this unused capacity and high laboratory and equipment costs, engineering schools are in grave financial trouble. The excess of expenditures over income of nonpublic engineering schools for 1970-71 is reportedly \$15 million or roughly 25 percent of the total deficits of nonpublic institutions for that year.

It is possible to allow the forces of supply and demand to take their natural course, but this approach is likely to jeopardize not only the strongest engineering institutions but it could affect the overall solvency of several important New York State institutions. Further, a significant reduction in engineering education capacity could prove shortsighted should the need for engineers increase in the immediate future, a strong likelihood considering that technology has increasingly become the foundation stone of our society.

Projected Needs in Engineering

The future need for engineers is dependent on many variables, not the least of which is the condition of the economy. Perhaps no other profession is so tied to the state of the economy as is engineering, and in the recent past the economy has been in a recessive state. But with the prospects of economic recovery emerging it would appear that the slump, acutely felt by engineers, is over. As *Fortune* recently stated, "The unemployment is expected to ease, as the economy improves and technology resumes its march, but then, paradoxically, a new problem will arise: a severe shortage of engineers. Freshman enrollments in engineering schools have dropped sharply as the appeal of an engineering career has declined. Effects of this drop-off will be felt for years. . . ." ²⁶

The national annual rate of growth in the demand for engineering personnel is projected to be between 2 and 2.6 percent.²⁷ The New York State Department of Labor, Division of Research and Statistics projects a growth rate of 2.2 percent for New York State,²⁸ whereas the Office of Planning Coordination projects a 2.6 percent annual rate of growth for New York State.²⁹

The Bureau of Labor Statistics estimates that the Nation will need approximately 45,000 baccalaureate engineering graduates each year. If New York State produces the same percentage of these engineers as it traditionally has produced, the State is projected to put 4,060 engineers with baccalaureate degrees on the market next year. However, a percentage of all B.S. graduates in engineering will go to graduate school, thereby delaying entry into the labor market. The National Science Foundation puts this figure at 42 percent nationally for 1969-70 ³⁰ whereas a recent survey of the Engineers Joint

²⁶ Judson Gooding, "The Engineers Are Redesigning Their Own Profession," *Fortune*, June 1972, p. 72.

²⁷ W. O. Fleekstein, "Economic Conditions in the U.S. Electrical, Electronics, and Related Industries; An Assessment," *I.E.E.E. Spectrum*, December 1971.

²⁸ "Manpower Requirements: Interim Projections New York State 1969-80," New York: Department of Labor, Division of Research and Statistics, July 1971.

²⁹ "Demographic Projections for 0-24 Age Group, by One-Year Age Intervals to 1995 A.D.," Albany, N.Y.: New York State Office of Planning Coordination, April 1969.

³⁰ "Trends in Graduate Education in Science and Engineering, 1960-70," National Science Foundation Reviews of Data on Science Resources, November 1971, p. 5.

Council³¹ placed the figure at 20 percent, having counted only full-time students. If it is assumed that 30 percent of all engineering graduates go on to graduate school, the State will have to generate 5,800 engineers each year to make 4,060 of them available in the market.

Obviously graduate study is also tied to the economy. If there is less money for graduate school, then a smaller percentage of students will continue their studies. Yet industry and business are demanding engineers with advanced degrees and will likely continue to do so as the economy improves.

Possible Problems in Meeting the Engineering Manpower Needs in New York State Through 1980

Decreased enrollments and degrees awarded signal fewer engineering personnel in the making.—The highly publicized unemployment among engineers in certain engineering specialties has adversely affected the number of young people who select engineering as a career. It has also been suggested that the nature of engineering education itself may be partially to blame. It is highly specialized and technically difficult. In view of the importance of engineering manpower to society, efforts should be encouraged at all levels to make an engineering career more attractive to young men and women at an early age.

Engineers are increasingly being forced to acquire graduate credentials beyond the baccalaureate level.—In years past, a B.S. in engineering was sufficient to assure a good paying job with upward mobility. This is no longer so. Business and industry are well aware that it is a buyer's market. Engineering schools will have to revamp their programs, and engineers will have to readjust their aspirations to fit the realities of the present job market. To succeed in engineering now and in the future, it may be essential to continue on to a graduate school. Present indications are that this trend may accelerate in the 1970's. A 1969 engineering study³² pointed out that, "Employers of engineers have over the years shown a steadily increasing appreciation for graduate work . . . Men with master's degrees are cur-

³¹ "Engineering and Technology Graduates 1971: A Report by the Engineering Manpower Commission of the Engineers Joint Council," New York: The Council, 1971, pp. 6-7.

³² Frederick E. Terman, "Engineering Education in New York," Albany, N.Y.: New York State Education Department, March 1969, pp. 17, 18.

rently being sought even more aggressively than those with bachelor's degree training, and men with doctor's degree training are in even shorter supply." The study also noted that the higher the degree, the higher the salary, and that the only engineers assured of continued status after years in the field are those with doctoral degrees.

*As needs for engineering education at all levels are increasing, a number of New York State's finest private engineering schools are in such desperate financial difficulty that they are threatened with extinction.—*The reasons for the plight of the private engineering schools are many: static enrollments, high cost of engineering programs, duplication of programs among competing institutions, lack of financial prudence. Without some kind of financial guidance from the State a number of these schools are headed for bankruptcy. The Regents call upon the institutions, the State, Industry, and the citizenry to assess the situation and develop viable procedures to better utilize and preserve these institutions. Engineering education is too valuable a resource with too high a replacement cost built up over too many years to allow it to survive or fail according to the law of supply and demand. The faculty expertise and the physical facilities, all acquired in a less inflationary era, would cost considerably more to duplicate at a future time.

The Regents will therefore review engineering education and propose guidelines to evaluate the fiscal management of all engineering institutions. The Regents will call upon the expertise of the Regents Advisory Council for Engineering to assist them.

Engineers experience a high degree of knowledge obsolescence.—Within a few years of graduation many engineers find that their specialty is no longer in demand or that much of the knowledge acquired earlier is obsolete. There is a need to provide retraining opportunities for those engineers who need it to maintain or update their education and skills. This retraining very often must be done on a part-time basis while the person holds a job. In addition, there are engineering technicians or corporate-trained persons who could profit from some form of post-baccalaureate training which would culminate in a degree. These persons usually hold an engineering level job but not a degree in the field.

The Regents consider it advisable to assure a means of continuing education at the graduate level for engineers needing increased competence and engineering technicians and corporately trained peo-

ple desiring accreditation. They propose an engineering development program designed to provide an alternative form of continuing graduate education for engineering personnel not presently reached by the traditional graduate engineering programs.

The engineering development program will be sponsored jointly as an industrial-academic venture and will be fiscally self-supporting. It will provide independent and part-time graduate level instruction for engineers needing retraining and engineering technicians and corporately trained people seeking degrees to help insure upward mobility.

A recent study by the State Education Department's Bureau of Research in Higher and Professional Education identified a need for the professional development degree program in engineering and the willingness of employers to accept credentials earned in such a program. The study also isolated a number of regional areas in the State that would be particularly receptive to this kind of program. Programs are now being designed in electrical engineering.

Conclusions

Considering the financial plight of the private engineering schools, the special problems unique to such technical education, and the anticipated need for engineers through 1980, the Regents will review and guide engineering program development and develop guidelines to evaluate the fiscal management of all engineering institutions, and they will be assisted in this endeavor by recommendations from the Regents Advisory Council for Engineering. Concurrently, the Regents will continue to examine categorical aid as one alternative solution to the fiscal plight of engineering schools.

Recommendation

The Regents recommend that

42. a pilot program be initiated based on the concept of the engineering development program to provide a new option for post-baccalaureate training for engineering personnel.

Unit 4: In the Health Professions

The Regents have a dual role: (1) encouraging and monitoring the educational process and (2) supervising the practice of the licensed professions. They are committed to assist in the improvement and distribution of health care to the citizens of New York State

through education.³³ Also, they are cognizant of the vast amounts of materials that have been published concerning the existing system of health care.

Critics charge that the medical and health care educational system of the Nation has been slow in responding to its health needs. They say there has been too little effective planning, monitoring, and accountability. They also argue that expansion of the health manpower supply, under the present delivery and financing systems, will fail to decrease costs, improve distribution patterns, or have any appreciable effect on the health of the population.

Concurrently, many critics say that despite tremendous progress in the delivery of health care services in the past 20 years, there is evidence of major weaknesses in the system as it exists today. Many of the weaknesses are associated with ³¹

- an inadequate number of health personnel (physicians, nurses, dentists, etc.) in rural areas and in central cores of cities;
- a rapid rising of costs and too few incentives to control them;
- a needless duplication of facilities;
- restrictive licensing and certification requirements; and
- inefficient organization.

This unit analyzes trends in educational output for the major health professions (medicine, dentistry, and nursing) by the schools of the State; examines New York State registration trends of these professionals; projects health professions educational needs in the State; identifies some of the problems; and makes recommendations to overcome some of the difficulties.

Current Data: Supply and Distribution

Supply—In analyzing the supply of health professionals, this subsection examines the trends of degrees awarded by New York State institutions by health field and compares these data with national data, both in relation to a specific degrees-awarded base. Where possible, supply from other sources (foreign countries, etc.) is included in the analysis.

³³ In line with the statement above, the Regents have endorsed the efforts of the Nursing Education Unit of the State Education Department to develop a statewide system for continuous regional planning for nursing education.

³⁴ (New York State) Governor's Steering Committee on Social Problems, "Report on Health and Hospital Services and Costs," New York: The Committee, June 1971, p. 14.

Nursing

Registered Professional Nurses (RN's)—The output of the educational system for nursing in New York State is ahead of the Nation as measured by nurse-to-patient ratios. In addition, the supply of RN's who are foreign-trained has significantly increased.

There are three types of initial programs in the State that prepare nurses for examination and licensure as RN's: (a) the hospital diploma program, (b) the junior college associate degree program, and (c) the college or university baccalaureate programs. These programs are termed "initial" to distinguish them from the post-RN baccalaureate degree and the higher degree programs that grant master's and doctoral degrees. In 1970, New York State had the largest number (139) of initial professional nursing programs of any state in the country.

From 1965 to 1970, there was a decrease in hospital diploma programs in the State from 90 to 73, which was offset by the combined increase of associate and baccalaureate degree programs from 38 to 66. The desirability of this trend is questionable, however. The professional organization of nurses, the American Nurses' Association, has recently supported the policy that all nursing education should be housed in institutions of higher education with the remaining hospital schools phased out according to a definite plan.³⁵ Opponents of this position cite data such as that collected in an analysis of a registered professional nursing examination conducted in New York State in July 1968. These data indicated that the average score on each measure recorded by diploma school graduates was higher than the score for graduates of associate degree institutions.³⁶ Analysis of subsequent examination scores indicates a continuation of this trend.³⁷ It is obvious that the quality of associate programs in nursing, as related to successful passing of the RN examination by program graduates and to hospital expectations and requirements, must be investigated. In light of these findings, the National Commission

³⁵ National Commission for the Study of Nursing and Nursing Education, "Summary Report and Recommendation," *American Journal of Nursing*, vol. 70, February 1970, p. 281.

³⁶ *Ibid.*, p. 287.

³⁷ In 1970-71, 60.5 percent of New York State associate degree graduates in nursing passed the RN Licensing Examination (compared to 75.8 percent for associate degree graduates in nursing nationwide). This compares to a passing rate of 84.6 percent for New York diploma school graduates, and 91.8 percent for New York State baccalaureate graduates in nursing for the same year and examination series.

for the Study of Nursing and Nursing Education has recommended increased research into both the practice of nursing and the education of nurses. They also called for the development of enhanced educational systems and curriculums based on the results of that research.

Qualified nurses are needed in the State to conduct this research, which as in other fields of endeavor provides the basis for improved practice and measurable benefits for patients. In addition, the number of nurses able to implement research findings in specialized practice in patient care, in teaching, in supervision, and in administration of nursing services should be increased. Only 16 percent of the current New York RN work force holds a baccalaureate or higher degree.

Many nurses cannot meet the relatively high costs of baccalaureate and higher degree education; a program of financial assistance to prepare more nurses at these levels is a priority for improved nursing education and practice.

The Regents will, therefore, have the Nursing Education Unit of the State Education Department

1. develop plans, in cooperation with selected educational institutions, for implementing an articulated program from the practical through the baccalaureate level in nursing. The planning should be initiated by mid-1973 and a report on the development of the program included in the Regents 1974 Progress Report
2. continue to work with nursing programs to establish mechanisms for more effective, efficient, and economic upward mobility of the various levels of workers within the broad field of nursing
3. develop a proposal to provide essential financial support for either full-time or part-time students in post-baccalaureate programs in nursing.

Undergraduate collegiate degrees and diplomas in nursing represented 5.7 percent of the total undergraduate degrees awarded in 1969-70 by New York State; nationally, this percentage was 2.3 percent. By this measure, the educational system of New York appears to be maintaining a favorable rate of output in initial professional nursing programs.

The supply of RN's also has been increased by the number of foreign-trained nurses annually licensed as RN's in New York State.

This number has increased from 671 in 1966 to 2,133 in 1970, an increase of 218 percent. To insure an adequate supply of RN's within the State, a program of assistance is justified to guide foreign-trained nurses applying for a license within the State.

Licensed Practical Nurses (LPN's)—Preparation for examination and licensure as an LPN is most frequently provided in programs conducted by hospitals and public vocational education systems. Between 1966 and 1970, practical nursing programs in New York State increased by more than 20 percent—from 91 to 110 programs. Undoubtedly, Federal assistance—through vocational education funds and Manpower Development and Training moneys—has been the primary impetus. The rapid growth of practical nursing is further illustrated by the fact that since 1968 New York State has graduated more practical nurses than either diploma, associate degree, or baccalaureate degree nurses. The supply of LPN's has been increased further by the number of licenses issued to foreign-trained practical nurses (78 in 1970).

Dentistry

New York State currently has dental schools at Columbia University, New York University, and the Buffalo Health Sciences Center. A fourth, at the State University of New York at Stony Brook, plans its initial enrollment for 1973. Although New York has for some time relied rather heavily on out-of-state schools to provide dental training for its residents, the majority of the State's dentists (63 percent in 1966) have been graduated by New York schools of dentistry.

The number of degrees granted annually in dentistry was static, increasing from 256 in 1966-67 to 260 in 1969-70, a gain of only 1.6 percent. This fact is more significant when it is noted that the number of applicants to New York dental schools tripled during the 1960's. Thus, an increasing number of New York State residents have had to seek their dental training out-of-state. New York State residents enrolled as dental school freshmen in out-of-state schools increased from 42 percent in 1962 to over 50 percent in the late 1960's.³⁸

New York would be in a vulnerable position if out-of-state schools were to adopt a policy of admitting fewer nonresidents. As

³⁸ "New York State Dental Manpower Study," Albany, N.Y.: New York State Education Department, Autumn 1971, p. 47.

the New York State Dental Manpower Study points out, "Whereas freshman enrollment at the five out-of-state schools most frequently attended by New Yorkers increased by 28 percent, enrollment at New York schools increased by only 6 percent (between 1962-63 and 1968-69). Thus the 25 percent increase in enrollment of New York residents [in dental schools] can be attributed almost entirely to the large increase [53 percent] in the number of New Yorkers attending out-of-state schools."³⁹

The new Federal capitation grant program may provide financial assistance to New York State dental schools. The law regulating this program requires that schools increase enrollment as a condition for receiving basic institutional support. It also encourages accelerating programs of study.

Medicine

New York State currently has eight private and four State-supported medical schools.⁴⁰ In 1969-70, they awarded 1,101 first-professional degrees in medicine, an increase of 166, or 17.8 percent, over the number awarded in 1966-67. The number of first-professional degrees in medicine in 1969-70 represented 34.3 percent of all first-professional degrees awarded in the State that year; this compares to 23.8 percent for the Nation.

From 1965 to 1969, the population of the State increased by 1.5 percent, the number of State-licensed doctors increased by 12 percent, and the enrollment of all the medical schools in the State increased by 24 percent. New York State medical schools appear to have made significant progress in promoting enrollment expansion.

New York State, however, has been and continues to be in debt to other states and countries for its medical manpower. Of the 2,435 physicians newly licensed in the State in 1969, 36 percent were graduates of medical schools in other states, and 34 percent were foreign medical school graduates. Also in 1969, 568 New York State residents entered medical schools in other states, while only 328 nonresidents were admitted to schools in New York, a difference of 240 students.⁴¹ Thus, New York State is significantly dependent on

³⁹ *Ibid.*, p. 50.

⁴⁰ See appendix B, p. 309.

⁴¹ J. E. Deitrick, M.D., "Report on the Financing of the Private Medical Schools of New York State," unpublished paper for the Associated Medical Schools of Greater New York, February 1970.

out-of-state institutions for its supply of medical manpower.

The Regents call on the medical schools of the State to move as expeditiously as possible to double the total number of medical students in New York.

Distribution

Nurses

In July 1970, there were 492 active RN's per 100,000 population in the State.⁴² This data entry includes both full- and part-time nurses. This compares to a national average of approximately 338 registered nurses per 100,000 population as of 1969.⁴³ The state-wide ratio, however, compares questionably to the RN distribution in nearby regions. As of 1966, the RN ratio for the New England region was 509 active registered nurses per 100,000 population (latest data available).⁴⁴ At that same time (1966), New York had approximately 410 active RN's per 100,000 population.

In a 1963 report to the Governor and the Regents,⁴⁵ the New York State Committee on Medical Education set a provision of 500 active RN's per 100,000 population as a 1970 goal for the State. Comparison of this goal to recent data indicates a shortage of approximately 1,600 active RN's as of 1970.

The critical factor in providing nursing service is the unequal distribution of RN's throughout the State. As of July 1970, the ratio of active RN's to 100,000 population varied from 677 in the northern region to 401 in the New York metropolitan area. Even more significant is the fact that, as of December 1971, approximately 30 percent of the RN's registered in the State were practicing out-of-state.⁴⁶ This condition should be investigated.

Dentists

As of 1970, there were nearly 13,000 professionally active dentists in the State, or 70 per 100,000 population.⁴⁷ In 1965, the

⁴² Data on active LPN's and auxiliary nursing personnel are not available for 1970.

⁴³ U.S. Public Health Service, "Health Manpower Perspective: 1967," Washington, D.C.: U.S. Government Printing Office, 1967, p. 40.

⁴⁴ American Nurses' Association, "RN's 1966," New York: ANA, 1969, p. 18.

⁴⁵ New York State Committee on Medical Education, "Education for the Health Professions: A Report to the Governor and Board of Regents," Albany, N.Y.: New York State Education Department, June 1963, p. 3.

⁴⁶ Source: New York State Division of Professional Licensing, December 1971.

⁴⁷ Op. cit., "Dental Manpower Study," p. 60.

Middle Atlantic States reported 58 active dentists per 100,000 population;⁴⁸ and in 1967 there were, nationally, approximately 40 active dentists per 100,000 population.⁴⁹ Thus, for the State as a whole, the number of practicing dentists compares favorably with the rest of the Nation. This is especially noteworthy when related to a recent Carnegie Commission report which stated, "On the whole, there is less evidence of a [national] shortage of dentists than of physicians, in relation to current demand."

There is, however, evident maldistribution of active dentists throughout the various regions of the State. As of 1970, the ratios among the regions differed from 78 dentists per 100,000 population in the New York City region to 35 dentists per 100,000 population in the St. Lawrence region.⁵⁰ An analysis of previous years' data indicates that the relative disparity among regions in distribution of dentists worsened from 1960 to 1968.

In attempting to deal with this problem, the 1972 session of the New York State Legislature considered a bill (Senate 7990) which would have provided 20 additional scholarships. These were to be awarded annually to students, beginning or engaged in the professional study of dentistry, who agreed to practice (upon completion of training) in an area of the State designated as having a shortage of dentists. Although this measure was not enacted, it appears to be one feasible alternative worthy of further consideration to solve the problems of dental personnel maldistribution and the resultant inequities in the dental care available to the citizens of the State.

Physicians

As of December 1971, there were nearly 36,500 physicians registered and practicing in New York State.⁵¹ This represents a ratio of approximately 190 physicians per 100,000 population, well above the national average of approximately 160 active physicians per 100,000 population.

The problems of maldistribution and accounting for numbers practicing out-of-state are, as with other health personnel, prominent ones. As of 1969, the physician-to-population ratio ranged from 265

⁴⁸ The Carnegie Commission on Higher Education, "Higher Education and the Nation's Health," New York: McGraw-Hill, October 1970, p. 19.

⁴⁹ Op. cit., Governor's Steering Committee, p. 19.

⁵⁰ Op. cit., "Dental Manpower Study," p. 9.

⁵¹ Source: New York State Board of Professional Licensing.

per 100,000 population in Westchester County (a suburban area) to 34 per 100,000 in Orleans County (a rural area). More importantly, nearly 25 percent of the physicians registered in New York State in 1971 practiced their profession out-of-state.

The uneven geographic distribution of medical manpower appears to be related to such factors as differences in per capita income among regional areas of the State, hospital and educational facilities in the regions, community size, and racial background.⁵² As the State moves toward a more adequate health care and maintenance delivery system, it will be necessary to devise special financial and nonfinancial incentives to induce physicians and other health personnel to work in low-income areas. An example is the current Special Regents Medical Scholarships for Areas of Physician Shortage. In this program, 30 scholarships are awarded annually to State residents who attend medical school, both as first-year students and as upperclassmen. Holders of the scholarships commit themselves to serve as physicians in a designated area of shortage for 9 months for each year's scholarship.

Projected Need for Selected Personnel

Many factors of uncertainty must be recognized in projecting the need for health personnel in the State. The expanding role of paraprofessional personnel—physician's associates and assistants, dental hygienists, nurses aides, etc.—will have a definite but unpredictable effect upon the quantitative need for health personnel in the future.

The New York State Department of Labor has projected the need for new personnel in various occupations through 1980.⁵³ In the health professions area the following 10-year projections were extrapolated:

| <i>Profession</i> | <i>Jobs To Be Filled: 1970-80</i> |
|--------------------------------|---------------------------------------|
| Physicians and Surgeons (M.D.) | 19,750 |
| Dentists (D.D.S.) | 6,000 |
| Nurses (RN) | 59,250 |

⁵² Op. cit., "Higher Education and the Nation's Health," p. 19.

⁵³ "Manpower Requirements, Interim Projections, New York State 1968-1980," Albany, N.Y.: New York State Department of Labor, July 1971.

In contrast, the expected supply of new personnel for the decade is projected as follows: ⁵⁴

| <i>Profession</i> | <i>New Personnel: 1970-80</i> |
|--------------------------------|-----------------------------------|
| Physicians and Surgeons (M.D.) | 19,610 |
| Dentists (D.D.S.) | 4,500 |
| Nurses (RN) | 64,840 |

As can be noted by comparison of projected supply and demand data there appears to be an expected deficiency of 1,500 dentists and 140 M.D.'s, and an expected surplus of 5,590 RN's.

This interpretation means that New York will not meet the demand for effective and efficient health care delivery in the present decade. It is obvious that more and different kinds of manpower will be needed than are indicated by the projected need data if the statewide distribution of these personnel and the health care and maintenance delivery system are to be improved and if overall personnel-to-population ratios are to remain favorable to regional and national trends. The Regents realize that the New York State Health Planning Commission has been charged with determining the actual number of physicians and other health personnel working in and needed in the State in accordance with their geographical distribution and in relation to State population trends. They await the findings of the commission and will take an active role in implementing the recommendations.

Qualitative Analysis

The problem of serious regional shortages of health professions personnel is not unique to New York State. A much-quoted statement by the Assistant Secretary of the U.S. Department of Health, Education, and Welfare indicates that the United States needs about 50,000 more physicians, "a couple of hundred thousand more nurses," and "almost 150,000 more technicians." ⁵⁵ The problems of limited enrollment opportunities at expensive medical schools and the highly uneven geographic distribution of health manpower have been major areas of concern for every state in the Nation.

⁵⁴ Generated by applying an in-State retention percentage to the average of New York State licenses issued by profession (Source: Division of Professional Licensing, New York State Education Department) linearly projected to 1980.

⁵⁵ "Country's No. 1 Health Problem: Interview with Top Presidential Advisor," U.S. News and World Report, LXX, February 23, 1970, pp. 68-73.

New York has provided its citizens with above-average educational opportunities in the health fields. As of 1968, the State ranked sixth in the country in medical and dental enrollments per 100,000 population.⁵⁶ As of 1969, it ranked first in the country (along with Minnesota) in the number of interns and residents (M.D.'s) in hospitals affiliated with medical schools per 100,000 population.⁵⁷

The translation of these enrollments and residency data into adequate health care delivery has been hindered, however, by the current patterns of utilization and distribution of this manpower (as detailed in the quantitative section of this report). To overcome this problem in the shortest time possible will require (1) a revision of the current mode of health care and maintenance delivery and (2) a coordinated educational transition to provide the kinds of health personnel that will be utilized in the new delivery systems. Concepts such as preventive health care services, prepaid medical group programs, and ambulatory health service centers are alternatives currently under consideration by various public agencies and professional organizations concerned with the problems of rising medical costs and unequal geographical accessibility of medical services. From these innovative systems the concepts of medical team health care delivery and the greater use of paraprofessionals—such as physician's associates and specialist's assistants—appear to offer a viable solution to the current shortages.

There are currently four physician's associate programs operating in the State, two in private institutions and two within the State University system and there are nine other programs currently in the planning stage.⁵⁸ The existing programs produced the State's first physician's associate graduates in June 1972. The Regents encourage this development and urge that the Department continue to evaluate and register quality physician's associate programs to meet the State's needs where such needs exist.

Further efforts are needed, however, in defining the duties of the physician's associate and other members of the proposed health team. These duties' statements will enable educational institutions to

⁵⁶ *Op. cit.*, "Higher Education and the Nation's Health," p. 86.

⁵⁷ *Ibid.*, p. 88.

⁵⁸ Approved programs (as of 10/27/72): Long Island University/Brooklyn Cumberland Medical Center (June 1972 graduates), Staten Island U.S. Public Health Service Hospital (June 1972 graduates), Hudson Valley Community College/Albany Medical College, Stony Brook.

coordinate the quality and scope of their programs with the requirements of the position. An excellent way to review present roles and relationships among the health team is to educate and train the team members together through coordinated instruction in as many core courses and clinical situations as is appropriate and practical. In this way, the various team members would become imbued early with their cooperating and overlapping relationships and functions. Also continuing education opportunities should be made available to practicing professionals as an aid to role transition within the health team concept.

A possible problem appears to be the acceptance of the role of the paraprofessional by both the patients and the health profession. It cannot be overstressed, however, that the needs of the State are current and obvious and that resistance offered to innovative measures to improve health care delivery to the State's citizens can only be described as detrimental to society. Insurance and legal problems must be defined, and appropriate laws enacted to facilitate practice under new organizational concepts.

The educational output from the medical schools of the State is another area that requires examination. Practically every medical school in the country has followed the Flexner model in structuring its educational programs. This model defines science as the base of medical education and calls for emphasis on biological research.⁵⁹ One of the weaknesses which has grown out of incomplete implementation of the model is that it has permitted duplication of the science available in university science departments. The sophistication and high quality of university science departments have been unavailable to the medical student who has been restricted to using the science departments of the medical school. A sizable increase in the productivity of existing medical schools may be possible by preparing the medical student in the sciences at the university level in his first year of study. The university could make use of the current oversupply of Ph.D.'s in the sciences by utilizing them as instructors for medical students.⁶⁰ In this way, a substantial number of additional students could be prepared for entry into the medical school curriculum at the second year—pathology and introduction to medicine—

⁵⁹ A. Flexner, "Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching," 1910.

⁶⁰ K. Penrod, "New Medical Schools: Can They Be Established Quickly at Less Expense?" *Journal of the American Medical Association*, vol. 218, October 25, 1971, pp. 571-573.

level. The primary clinical teaching effort of the medical school could then be concentrated in the middle years of medical instruction. This could be integrated with a movement of senior medical students into area hospital clinical facilities for the latter part of their medical education.

Other ways to increase medical school output have been recommended by various organizations and deserve consideration. These include (1) revising medical school curriculums to reduce the program time from 4 to 3 years, (2) reducing internship and residency programs from 4 to 3 years, (3) instituting 6-year programs from high school graduation to attainment of a medical degree, and (4) creating a degree between the A.B. and the M.D. which would allow a medical student to be employed as a teacher or a medical assistant or associate.

The Regents encourage experimentation with these alternatives which would reduce the barriers between universities, medical schools, and community hospitals. They might also increase the production of physicians and other medical personnel at a reasonable cost. The Regents stress, however, that the current high quality of the State's medical school graduates must be maintained and that the quest for more medical personnel must never supersede this objective. However, a report from a recent study by a gubernatorial committee recommended that "before any new funds are spent to construct new medical schools, we recommend increasing the output of existing schools by fuller utilization of their present facilities. . . ." ⁶¹ Thus the need for innovation in a time of fiscal constraint is apparent.

Recommendations

Toward the realization of a more efficient and effective system of health personnel education and health care delivery, the Regents recommend the following measures:

43. that the current Joint Committee on Professional Practice of the New York State Boards for Medicine and Nursing pursue the delineation of the appropriate relationships in practice among the physician, the physician's associate, the specialist's assistant, and the registered professional and licensed practical nurse
44. that the medical and dental schools of the State report, by June 1, 1973, the further steps they are taking to increase

⁶¹ *Op. cit.*, Governor's Steering Committee Report, p. 49.

their educational output (enrollments and degrees) and to improve the effectiveness and efficiency of health care delivery, through measures such as program innovation, curriculum redesign, and continuing education opportunities

45. that the State and Federal governments approve appropriate incentive plans for all health care personnel that will guarantee a more equitable distribution of these professionals throughout the State
46. that further plans in the health professions area be considered in relation to the recommendations of the New York State Health Planning Commission at such time as its report is made available.

Part III: The Collegiate Population To Be Served and the Resources Available

Section 1: Enrollments and Degrees in Higher Education

This section provides measures of the projected impact of the Regents policy decisions concerning equalizing educational opportunity and enrollment expansion at the undergraduate and graduate levels and controlling graduate degree programs; it examines the enrollment projections of each of the higher education sectors in relation to Regents goals and objectives; and it makes recommendations to achieve the enrollment goals of New York State.

Undergraduate Enrollments and Degrees

High School Graduates—The number of high school graduates in New York State between 1961 and 1971 rose from 165,200 to 234,300, an increase of 42 percent.⁶² The number of high school graduates is expected to increase to a maximum of 262,400 in 1979, an increase of only 12 percent. By 1985, just under 235,000 graduates are expected, approximating the 1971 class. This decline in the number of high school graduates will result in declining freshman enrollments during the 1980's.

Full-Time, First-Time Freshman Enrollment—Full-time, first-time freshman enrollment increased from 64,600 in 1961 to almost 137,700 in 1971, a gain of 113 percent.⁶³ This increase compares with a 42 percent increase in the number of high school graduates during the same period. In 1961, the full-time, first-time freshman enrollment represented over 39 percent of New York's high school graduates for that year. This percentage rose to almost 59 percent in 1971 partially as a result of such special programs as Open Admissions and Toward Full Opportunity.

⁶² See appendix A, table 18, p. 283.

⁶³ See appendix A, table 18, p. 283.

The Regents objective is to increase full-time, first-time freshman enrollment in New York State colleges and universities to 70 percent of the year's high school graduates by 1980. This objective, after taking into account student migration patterns and students who register in noncollegiate post-secondary programs, will provide for implementation of the full opportunity program by 1980. To achieve this objective will require provision for 181,500 full-time, first-time freshmen in 1980, an increase of 32 percent over the 1971 freshman enrollment.⁶⁴ Because of the expected decline in high school graduates occurring after 1981, the 1985 freshman enrollment of 171,300 will represent a 5.6 percent decline from the 1980 level.

The plans of the three higher education sectors provide enough freshman places in 1980 to achieve the Regents objective. State University, excluding the community colleges sponsored by the New York City Board of Higher Education, is planning to increase its full-time, first-time freshman enrollment from 59,700 in 1971 to 84,000 in 1980. The 1980 planned enrollment represents over 32 percent of that year's high school graduates. The percent of high school graduates attending senior campuses of State University will decrease from 7.5 percent in 1971 to 7.1 percent in 1980. This decrease will further limit entry to these institutions and possibly raise the average admissions score above its already high level.

The freshman enrollment at City University and the community colleges sponsored by the New York City Board of Higher Education is expected to remain at approximately 40,000 students throughout this decade.

The remaining 58,000 freshmen can be accommodated by private colleges and universities and through increased nontraditional collegiate options such as the Regents External Degree Program. Accommodation of these students will depend primarily on the ability of the private institutions to remain economically viable. Unless a more effective student aid program is funded by the State and Federal governments, it is doubtful that private institutions will be able to attract an adequate number of students because their costs, rising almost as rapidly as those in the public sector, must be covered by raising tuition rates.

Undergraduate Enrollment—Enrollments at the full-time undergraduate level have grown from slightly under 209,000 in 1961 to

⁶⁴ See appendix A, table 18, p. 283.

more than 467,000 in 1971, an increase of 123 percent.⁶⁵ The difference between sector expansion rates was significant as public institutions increased their full-time undergraduates by over 245 percent during this period; the increase in the private sector was only 42 percent. Within the sector components, public 2-year colleges showed the largest growth rate with an increase of 438 percent from 1961 to 1971.

The role of public institutions has increased significantly at the undergraduate level. Their increased role is due to their accessibility to students because of subsidized low tuition rates, to their diversified program offerings, and, in the case of community colleges, to the proximity of campus locations to home residence.

The full-time undergraduate enrollment projection for 1980 is 643,000, with 5 percent of this number expected to enroll in nontraditional collegiate programs. This projection is based on four factors: (1) recently revised projections of the number of high school graduates, (2) the Regents objective of full-time, first-time freshman enrollment placed at 70 percent of New York State's high school graduates by 1980, (3) specified net migration assumptions, and (4) increased mobility of students transferring from 2-year to 4-year institutions.⁶⁶ The 1980 enrollment projection is 38 percent over the actual 1971 enrollments; it results from a 10.6 percent increase in the number of high school graduates combined with the planned increase in the college-going rate during the period. The projected enrollment increase is consistent with national enrollment projections forecasted by the Carnegie Commission which predicts a 60 percent increase in enrollments between 1970 and 1980.⁶⁷ The new projections of full-time undergraduate enrollment expected in 1980 are 4 percent below the projections presented in the 1970 Progress Report of the 1968 Regents Statewide Plan because of the lower high school graduate projections. (See figure 2.)

In the early 1980's, however, undergraduate enrollment is expected to decline slightly following the decline in the number of high school graduates. Therefore, careful attention must be given to planning and resource allocation during the 1970's to prevent an overexpansion of educational resources, especially physical facilities, for the 1980's. Enrollments through the end of this century will tend to stabilize around 640,000 students.

⁶⁵ See appendix A, table 18, p. 283.

⁶⁶ See appendix A, sources for table 18, no. 4, p. 285.

⁶⁷ Carnegie Commission on Higher Education, "New Students and New Places," New York: McGraw-Hill, October 1971.

| | 1975 | 1980 | 1985 |
|---------------------|---------|---------|---------|
| ORIGINAL PROJECTION | 558,400 | 681,500 | 640,000 |
| REVISION | 540,700 | 643,000 | 635,900 |
| DIFFERENCE | -17,700 | -38,500 | -4,100 |

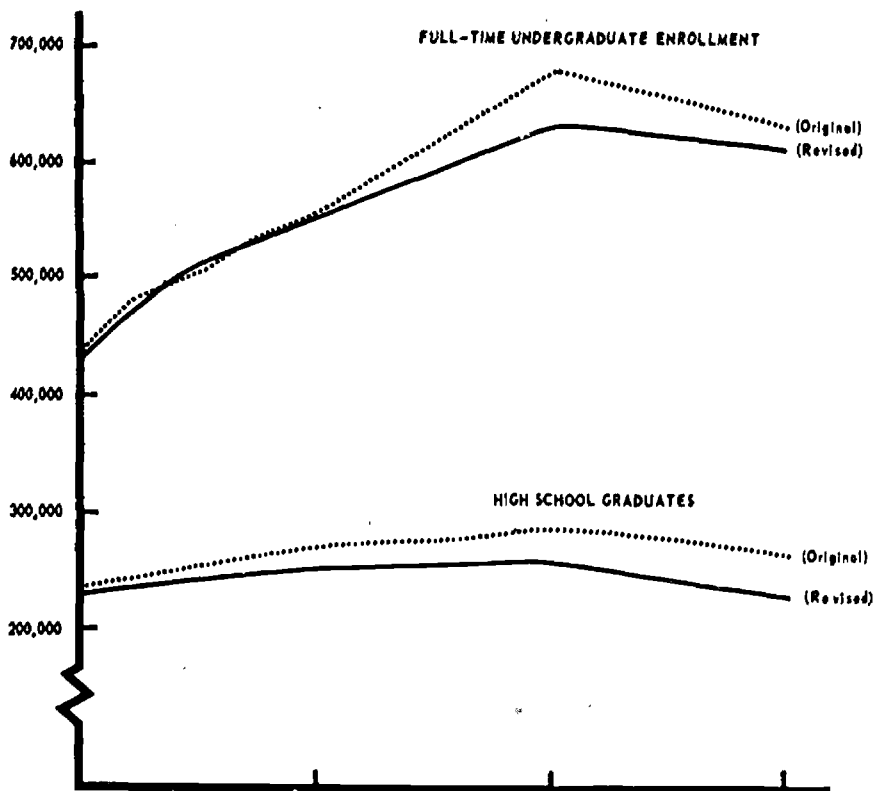


FIGURE 2, REVISED FULL-TIME UNDERGRADUATE ENROLLMENT PROJECTIONS

Associated with any projection is uncertainty. In projecting undergraduate enrollments in this plan, the uncertainty takes two forms. First, there is the statistical uncertainty or variability inherent in any methodology attempting to predict the future based on the past. Consequently, the enrollment projections in this section must not be used as absolute levels, but rather be used as overall indicators of the direction towards which and the speed with which the system should change. The second, and equally important, type of uncertainty relates to the future structure of the higher education system. The enrollment projections in this section are couched in what are now conventional terms (i.e., full-time undergraduate enrollment). It is likely that the higher education system will change in such ways that the present methods for accounting for students (credit hours, upper-lower division, etc.) may become outmoded. As these changes become evident, the projections will be adapted to better describe the potential population. Any interpretation of these projections should be cautiously undertaken in full awareness of the constant flux in the students' classification system and its possible obsolescence.

The following table summarizes the full-time undergraduate enrollment goals of the three sectors in relation to the Regents objectives for 1975 and 1980.

Table 2. Full-time Undergraduate Enrollment for the Years 1975 and 1980

| | 1975 | 1980 |
|---|---------|---------|
| (1) | (2) | (3) |
| Regents Objective | 540,700 | 643,000 |
| State University ¹ | 206,600 | 249,500 |
| City University ^{2, 3} | 160,000 | 180,000 |
| Private Colleges and Universities | 194,200 | 210,800 |
| Sector Total | 560,800 | 640,300 |
| Difference (Sector Total minus Regents Objective) | +20,100 | -2,700 |

¹ Excludes community colleges sponsored by the New York City Board of Higher Education under the program of State University.

² Includes community colleges sponsored by the New York City Board of Higher Education under the program of State University.

³ Full-time enrollments estimated by the State Education Department based on projection A of The City University Master Plan. The City University Master Plan did not include enrollment projections by type of attendance.

Based on the sector projections, it appears that there may be an excess of enrollments (4 percent) planned by institutions over the number of expected full-time undergraduate students in 1975. For 1980, the sector projections and the Regents objective are in reasonable balance (differing by less than 1 percent).

The private college master plan projections appear to be optimistic under existing financial arrangements. If present arrangements continue, private colleges are likely to enroll 10,000-15,000 fewer students than they are willing to serve in 1975. The Regents feel, however, that their stated enrollment goals should be achieved; this achievement would result in improved utilization of the vast physical resources of the private sector. The Regents call for new financial arrangements to permit private institutions to achieve enrollment goals.

The undergraduate enrollment projection for City University and the community colleges in New York City adopted by the New York City Board of Higher Education (BHE) calls for an increase of over 46,000 full-time students from 1971 to 1975. This projection is based on their assumption of improved retention rates for open admission students. While the Regents support programs to improve retention rates, the Regents have no basis now for assuming this improvement will occur. Consequently, the Regents support the Plan A projection developed in The City University master plan. This establishes a 1975 day session matriculated undergraduate goal of 161,000 or 10,000 less than the Plan B goal recommended by the board of higher education. If the subsequent experience justifies a shift to the Plan B enrollment goals, the Regents will review this position.

The 1980 full-time undergraduate enrollment goals in the 1972 State University master plan are 65,000 students lower than the enrollment goals approved for SUNY in their 1970 progress report. State University will provide for an increasing number of 2-year to 4-year transfers, but it appears that the demand will continue to exceed the number of places available. In attempting to meet this demand, State University is projecting a 32:68 lower to upper division ratio in 1980. This far exceeds their approved 40:60 ratio, and its implications must be carefully and continually assessed. The Regents reaffirm their support of the educational desirability of the 40:60 ratio. The Regents urge that mechanisms be developed to enable private institutions to play a role in meeting the educational needs of 2-year college graduates.

Minority Enrollments

The characteristics of the 1980 student population are expected to differ from those of the 1970 population as a result of substantial progress towards the Regents goal of equalization of educational opportunities. In 1970, minorities represented over 14 percent of New York State's 18 to 24 age population. However, they accounted for only 41,000 students or 9.5 percent of the full-time undergraduate enrollment. The Regents expect that this number will grow to 80,000, representing 12.5 percent of the projected full-time undergraduate enrollment. The largest portion of this increase is expected to come from black and Spanish-surnamed American enrollments, rising from 35,100 in 1970 to 75,000 in 1980. Increased minority enrollments will result from expanded programs for the disadvantaged and, more importantly, from more effective integration of regular academic programs.⁶⁸

The Regents expect that the 1980 full-time undergraduate enrollment will have a 50:50 male-to-female ratio. Gradual movement from the 1970 male-to-female ratio of 56:44 will result as greater numbers of women begin to enroll in traditionally "male" academic fields and as employment practices change.

Undergraduate Degrees

Associate and baccalaureate degrees conferred grew from over 42,000 in 1960-61 to over 94,000 in 1969-70, an increase of 123 percent.⁶⁹ Associate degrees grew over 251 percent during this period as compared with a 94 percent gain in baccalaureate degrees. As a result of the projected increase in undergraduate enrollment, total undergraduate degrees conferred are expected to grow to about 173,000 by 1980, an increase of 84 percent over 1970. Associate degrees will continue to grow more rapidly than baccalaureate degrees. During this period, the increase in associate degrees is projected to be 118 percent, while a 71 percent increase is expected in baccalaureate degrees.

Graduate and First-Professional Enrollments

Graduate and First-Professional Enrollments—The Regents goal is to strengthen the quality of graduate education while meeting

⁶⁸ "Minority Access to and Participation in Post-Secondary Education: A Statement of Policy and Proposed Action," Albany, N.Y.: New York State Education Department, May 1972 (Regents Position Paper No. 15).

⁶⁹ See appendix A, table 19, p. 286.

New York State's needs for these programs. To this end, the Regents are considering three policy decisions that directly affect graduate and first-professional programs:

1. to modify certification requirements for elementary and secondary school teachers whereby a degree at the master's level or 30 credits beyond the baccalaureate is not mandatory
2. to reserve the use of the Ph.D. degree to programs of sufficiently high quality to develop competent research potential
3. to significantly increase enrollments in selected first-professional degree programs, especially in the health sciences, to meet societal needs for programs in this area.

Implementation of these policy decisions should result in a lower full-time graduate and first-professional enrollment than had been projected previously. Specifically, the revised enrollment projections represent reductions of 18 percent for 1975 and 27 percent for 1980 from previous projections.⁷⁰ Total full-time graduate and first-professional enrollment, however, is still expected to increase from 57,800 in 1971 to 66,900 in 1975, a gain of 16 percent. The three sectors of higher education expect to enroll 66,000 full-time graduate and first-professional students in 1975. Based on these projections, it appears that there will be reasonable balance between the demand for and the number of places available for graduate education.

Master's Enrollment and Degrees—Full-time master's degree-credit enrollment for the State is expected to expand from 24,098 in 1970 to 35,900 in 1980.⁷¹ This increase of 49 percent is lower than the growth experienced during the past decade and reflects the effect of the Regents policies, offset in part by an expanding population pool from which graduate enrollments are drawn. The demand is expected to decline. This expected decline will have a significant impact on part-time master's degree enrollment since a high proportion of this enrollment is in the field of education.

In 1970, nearly 20 percent of the total full-time master's enrollment and 42 percent of the part-time master's enrollment were in education.⁷² This enrollment resulted in 39 percent of all master's degrees awarded in 1970 being in the field of education.⁷³ Although

⁷⁰ See appendix A, table 20, p. 287.

⁷¹ See appendix A, table 21, p. 288.

⁷² See appendix A, table 22, p. 289.

⁷³ See appendix A, table 23, p. 290.

the revised graduate projections have included the expected effects of the curtailment of specified master's degree demand, projections by specific field can be developed only after the policy decisions are stated in more precise, numerical terms.

Master's degrees awarded in New York State grew from 17,357 in 1964-65 to over 26,500 in 1969-70, an increase of 53 percent.⁷⁴ It is expected that over 34,600 master's degrees will be awarded in 1979-80. The most rapid growth will be in interdisciplinary and professional fields other than education.

Doctoral Enrollments and Degrees—The Regents have commissioned a study of the quality of doctoral education in New York State. The purpose of the study is to reassess doctoral education in New York State and to recommend changes to strengthen the quality of such programs. Full-time doctoral enrollment is expected to increase almost 18 percent, from 17,000 in 1970 to 20,000 by 1980.⁷⁵ This rate of growth is lower than the rate in the previous decade and is based on achieving a more reasonable balance of supply and demand. It is expected that the number of doctoral degrees awarded will also increase more gradually than in the previous decade. The 1980 figure of over 3,900 will represent a 19 percent increase over the 1970 level.⁷⁶

First-Professional Enrollments and Degrees—The Regents encourage increased enrollments in selected first-professional fields, especially the health professions, in response to manpower needs. Thus the projected 1980 full-time, first-professional degree-credit enrollment of 22,900 represents an increase of 61 percent over the 1970 figure of 14,200.⁷⁷ As a result of these enrollments, first-professional degrees are expected to grow from 3,203 in 1969-70 to almost 6,000 by 1980, an increase of 86 percent.⁷⁸

The public-to-private ratio is expected to change from a 1970 ratio of 20:80 to a 1980 ratio of 26:74.⁷⁹ Private institutions clearly will continue to play the dominant role in the first-professional area, but expansion of enrollments will need to be preceded by examination of present facilities utilization in the specialized health professions areas. Enlarging the pool of enrollments will cause

⁷⁴ See appendix A, table 24, p. 292.

⁷⁵ See appendix A, table 21, p. 288.

⁷⁶ See appendix A, table 24, p. 292.

⁷⁷ See appendix A, table 25, p. 293.

⁷⁸ See appendix A, table 24, p. 292.

⁷⁹ See appendix A, table 25, p. 293.

new demands on existing specialized facilities; expansion of these facilities would represent a huge capital requirement for new construction. Alternatives to this approach include an examination of current time required in preprofessional study and a change in current enrollment levels at existing facilities.

Table 3. Full-time Enrollment Goals for the Years 1975 and 1980

| | 1975 | 1980 |
|---|---------|---------|
| (1) | (2) | (3) |
| <i>Regents Total Full-Time Enrollment</i> | 607,600 | 721,800 |
| State University ¹ | 224,900 | 273,500 |
| City University ^{2, 3} | 149,200 | 175,600 |
| Private Colleges and Universities | 238,900 | 259,200 |
| Unallocated ⁴ | (5,400) | 13,500 |
| <i>Regents Undergraduate Goal</i> | 540,700 | 643,000 |
| State University ¹ | 206,600 | 249,500 |
| City University ² | 145,000 | 170,000 |
| Private Colleges and Universities | 194,200 | 210,800 |
| Unallocated ⁵ | (5,100) | 12,700 |
| <i>Regents Graduate and First-Professional Goal</i> | 66,900 | 78,800 |
| State University | 18,300 | 24,000 |
| City University ^{3, 4} | 4,200 | 5,600 |
| Private Colleges and Universities | 44,700 | 48,400 |
| Unallocated ⁵ | (300) | 800 |

¹ Excludes community colleges sponsored by the New York City Board of Higher Education under the program of State University.

² Includes community colleges sponsored by the New York City Board of Higher Education under the program of State University due to lack of detail in the City University master plan.

³ Excludes the Mt. Sinai School of Medicine which is affiliated with The City University of New York.

⁴ The 1980 enrollment goal was estimated by the State Education Department. The City University master plan projected graduate enrollment to 1975.

⁵ Difference between Regents goal and the sum of the sectors goals.

Recommendations

The Regents recommend the following with respect to enrollment goals:

47. that the projections for full-time undergraduate enrollment

shown in table 3 be approved as the basis for planning in order that the Regents enrollment objectives be achieved. However, because of the uncertainties associated with the projections, especially with respect to the need for a new financing arrangement, the Regents approve undergraduate enrollment goals for the State and City Universities only through 1975 and defer action on the goals for 1980.

48. that the projections for full-time graduate enrollment in table 3 be approved for long-range planning, but the Regents defer specific approval of the enrollment goals pending their action on the "Report of the Commission on Doctoral Education."
49. that new financial arrangements be developed to enable private institutions to meet the undergraduate enrollment goals in the master plan of the Commission on Independent Colleges and Universities
50. that State University accelerate the development, for its senior campuses, of admissions procedures that use criteria in addition to high school achievement
51. that mechanisms be developed to enable private institutions to play a more vital role in meeting the educational needs of 2-year college graduates.

Section 2: Higher Educational Resources

Unit 1: Faculty in Higher Education

The strength of any higher education institution is a competent and dedicated faculty. A highly developed society depends on them to transmit its truths, to stimulate an environment in which new knowledge (scientific, psychological, and humanistic) can flourish, and ultimately to preserve, in a repository manner, a people's mores, customs, and artifacts. New York State is well equipped with such a highly qualified faculty which should be viewed as a major educational resource. As with all resources, efforts must be made to insure the continuity of such a teaching force without depleting or eroding one of the State's most valuable assets—a core of educational workers to guide students in their intellectual development.

This unit (1) describes, in quantitative and qualitative terms, the current status of faculty in the colleges and universities of the State, both public and private; (2) projects the need for additional faculty in the seventies; (3) identifies anticipated problems and discusses some of the pressing issues in the faculty field; and (4) makes recommendations for the resolution of the problems.

Current Status

This unit quantitatively identifies and describes the State's higher education full-time faculty.⁵⁰

Nearly 38,000 full-time faculty members taught in the State's colleges and universities in 1970. Slightly over 18,000, or 48.1 percent, were in private colleges and universities, and almost 20,000, or 51.9 percent, were in public colleges and universities.⁵¹

These faculty provided instruction in 1970 to nearly a half million full-time students enrolled in the State's colleges and universities. This resulted in a full-time student/faculty ratio of slightly less than 13 to 1. Among the State's higher education sectors, the full-time student/faculty ratios were 14 to 1 for the public sector and 12 to 1 for the private sector.⁵² This difference can partially be attributed to two factors:

1. Of the private sector's full-time enrollment, 18 percent are graduate students as compared to only 6 percent in the public sector. Graduate education has traditionally maintained lower student/faculty ratios.
2. The public sector's higher ratio includes the community colleges whose student/faculty ratio is higher than the traditional 4-year public institution.

At 2-year institutions, there were slightly less than 7,000 full-time faculty and nearly 113,000 full-time students in 1970, for a student/faculty ratio of 17 to 1. The ratios were approximately equal for both public and private 2-year institutions.

At the 4-year institutions, nearly 31,000 full-time faculty provided instruction for over 382,000 full-time students in 1970, a student/faculty ratio of 12 to 1. The public 4-year ratio was 13 to 1, while the private 4-year ratio was 12 to 1.

Student/faculty ratios provide a quantifiable measure of the current status of the faculty in higher education institutions in the State, but they do not provide the only measure. The quality of faculty is less easily measured, but indicators of faculty quality can be observed. The Regents Academic Chair Program, initiated 7 years

⁵⁰ As reported in Higher Education Data Survey, Form No. NYSED 3, Sections D and G. This full-time faculty includes academic deans, professors, associate professors, assistant professors, instructors, lecturers, and others of undesignated rank.

⁵¹ See appendix A, table 28, p. 296.

⁵² *Ibid.*

ago to attract the world's most distinguished and renowned scholars to New York State, has not only attracted other eminent scholars and financial resources to the State, but also has increased the intellectual vitality within the State. An assessment of this program has just been completed by the Bureau of Research in Higher and Professional Education.⁸³ Such programs are invaluable in their contribution to educational quality and should be continued.

Another indicator of faculty quality is the quality of the publications in professional journals and the numerous books published by New York State faculty members. The body of knowledge in many disciplines has been appreciably added to by the writings and research of New York State's faculty members.

It is essential to have competent and qualified faculty for the institutions of higher education, and every effort must be exerted to assure the continuation of such faculty in New York State.

Projection of Faculty Needs to 1980

The projected full-time enrollment for the colleges and universities of the State will be nearly 722,000 by 1980, or an increase of 46 percent over 1970. The projected faculty needs for this student population are subject to a number of issues which could change, including the following: (1) As institutions seek fiscal solvency and better faculty utilization, one area to be assessed and probably changed will be student/faculty ratios; (2) new programs (open access, external degree, independent study) will demand a different faculty utilization than heretofore—faculty will be called upon to serve in a counsel or adviser role and to be more flexible in their designing of academic programs for students; (3) the possibility that departments within higher education institutions may consider the sharing of faculty through joint region appointments. The projections then will vary significantly as new instructional techniques and educational options are developed and made available in the seventies.

Conceivable Problems in the Seventies

The Role of the Faculty—The role of the faculty is multifaceted. Although the public views the faculty member primarily as a teacher, some college administrators and some faculty for many years have placed their priorities on research, writing, consulting,

⁸³ "The Regents Academic Chair Program," Albany, N.Y.: New York State Education Department, autumn 1971.

and graduate education, often to the detriment of undergraduate education. Administrators, ever mindful of the intense competition for funds and concerned with enhancing their university's prestige, have frequently based their evaluation of faculty members on their publication records and grantsmanship abilities rather than on the quality of their teaching. Students have long complained of this and have found ready allies among those faculty members dedicated to teaching. However, until the majority of college administrators demonstrates a willingness to reward with promotions, salary increases, proper esteem, and influence those faculty members who regard teaching as their primary role, it is unrealistic to expect faculty members to shift their priorities to teaching.

Recent trends have motivated many college faculties to reassess their roles. Opportunities for increased contact between students and faculty have been occurring on many campuses throughout the State. Lectures are being replaced by seminars, increasing the dialog between student and teacher. More chances for independent study are evolving. Many institutions are increasing students' options for offcampus study. The entire grading system is being reexamined. Students are participating in faculty evaluations and in the preparation of curriculums. The faculties of the State should be commended for these efforts, but many more reforms are needed.

Program design, in which the faculty plays a major role, is in need of reform. Students begin the college experience with a wide variety of interests which could, if allowed free rein, result in diverse opportunities for general education for the student. In their role as counselor to the student, faculty members all too frequently curb the student's tendency toward diversified educational endeavors and quickly channel the student into a highly structured educational experience. For some kinds of students, this may be advisable, but, for many, this early specialization thwarts creativity and inhibits the natural selectivity of the student. The faculties need to decrease their resistance to curricular reform and deemphasize the importance which they place upon credit hours, major sequences, and highly specialized offerings. This can be accomplished by emphasizing multidisciplinary experiences for students. Team teaching of interdisciplinary offerings will not only broaden students' interests, but will also contribute significantly to decreasing parochial departmental philosophies.

Faculty Recruitment—Civil rights legislation of the past few

years and the increased visibility given to the disparate numbers of women and minority members on college faculties have led to increased emphasis upon developing ways to attract competent members of these groups to college campuses. Some colleges and universities in the State have assumed the initiative by adopting recruitment policies that bring these traditionally underrepresented groups to their campuses, but it is essential that this initiative be expanded to include all the institutions in The University of the State of New York.

To this end, the recruitment of qualified women and minority group members to the faculties of the State is one of the Regents specific objectives for higher education.⁸⁴ The term, "minority groups," includes, but is not limited to, blacks, Spanish-speaking citizens, and American Indians.

The moral mandate for the hiring of faculty from all ethnic groups and sexes has always been with us. However, it has been largely ignored to date. This is no longer permissible. The Regents position paper on "Minority Access to and Participation in Post-Secondary Education"⁸⁵ states, "Not only is integration an imperative and viable approach to education, it is the only legal one." The paper speaks directly to the recruitment of faculty members and professional staff from minority groups. It encourages institutions to reassess the procedures used in faculty recruitment and hiring and to take affirmative action to assure recruitment from these groups.

Another Regents position paper, "Equal Opportunity for Women,"⁸⁶ urges governing boards and executive officers of all New York State educational institutions to develop affirmative action plans. These would include realistic numerical goals and timetables for the recruitment of women and their promotion to professional and managerial positions. The theme of this paper, when added to the Federal constitutional amendment mandating equal opportunity and pay for women (currently awaiting ratification by the states), creates an undeniable mandate to all institutions to provide more opportunities in higher education for qualified women. The Regents expect all institutions to report their progress toward increased faculty

⁸⁴ See specific objective number 5, p. 12.

⁸⁵ "Minority Access to and Participation in Post-Secondary Education," Albany, N.Y.: New York State Education Department, May 1972 (Regents Position Paper No. 15).

⁸⁶ "Equal Opportunity for Women," Albany, N.Y.: New York State Education Department, April 1972 (Regents Position Paper No. 14).

representation of minority groups and women in the institutions' 1974 progress reports.

In addition to women and minority groups, there exists in New York State another faculty resource which has gone untapped—those people qualified by long years in a trade, business, museum, or other cultural institution. These practitioners have been closed out of the educational enterprise because they lack the "credentialism" prerequisite to teach in an institution of higher education. This must be altered. Faculty with a diversity of talent, drawn from the widest possible spectrum of our society to transmit their vast knowledge and expertise to students, must be attracted. Barriers which prevent the recruitment and employment of these people must be removed. Practitioners should be given flexible schedules so they may combine teaching with their other responsibilities, and existing policies must be examined to permit short-term employment of these people.

Just as the students entering our higher education institutions are heterogeneous, so should their teachers be. Qualified, diversified faculty from all population groups have significant contributions to make to the quality of higher education.

Academic Freedom—The Regents endorse the principle of that section of the AAUP 1940 Statement of Principles on Academic Freedom and Tenure⁵⁷ which deals with the concept of academic freedom. Academic freedom is defined as "the right of members of the academic community freely to study, discuss, investigate, teach, conduct research, publish or administer, as appropriate to their respective roles and responsibilities."

It is in this context that the Regents acknowledge the societal benefit to be derived from faculty with specialized skills, talents, and intellectual ability who have freedom to pursue and transmit the truth within their particular area of competency. They do, however, believe that the concept of academic freedom should be accompanied by increased responsibility both in and out of the classroom. "For academic freedom to endure, academic responsibility must be exercised. The academic community which asks protection from outside interference in order to perform its mission must not tolerate sabotage of that mission by its own members."⁵⁸

⁵⁷ Louis G. Joughlin, ed., "Academic Freedom and Tenure: A Handbook of the American Association of University Professors," Madison, Wis.: University of Wisconsin Press, 1967, pp. 33-39.

⁵⁸ Statements on Academic Freedom and Responsibility and Academic Tenure, adopted by the American Association of State Colleges and Universities in November 1971.

In essence, for every right there is a duty. A faculty member, protected by academic freedom, has a duty to limit his own freedom so that it does not impinge on the freedom of others.

The Regents, therefore, urge (1) that the institutions establish guidelines to discipline those faculty members who misuse, either in or out of the classroom, the rights and privileges their faculty status confers; (2) that each institution, which has not already done so, establish procedures that will guarantee individual faculty members the right of "due process of grievance" when they are challenged about academic freedom.

Faculty Productivity—In a time when the funding of higher education is being closely scrutinized and challenged, it is inevitable that the issue of "faculty productivity" should arise. In the 1971 and 1972 sessions of the New York State Legislature, several legislators introduced legislation to monitor the number of clock hours of teaching which would be required of each faculty member. The Regents attitude at those times was that to limit evaluation or productivity to quantifiable measures alone—clock hours taught and student/faculty ratios—was unacceptable, and the Governor subsequently vetoed the bill on this basis. The Regents, therefore, urge that all institutions involve their faculty (student input should be involved also) in the development of faculty productivity evaluation mechanisms which would include all aspects of faculty participation in the educational effort. These mechanisms would consider the roles of counseling (graduates and undergraduates), administration, and classroom preparation and delivery essential for good classroom learning. It is thus affirmed that any evaluation of faculty productivity should include all aspects of the teachers' role.

The increase in productivity, traditionally used by business and industry as a rationale for salary increases, has never been applied to faculty resource management. Since the end of World War II, faculty salaries have risen appreciably, but methods of measuring productivity have not increased at a corresponding rate. While the Regents recognize that higher salaries are required to attract highly qualified personnel, the resulting increase in cost to students and to citizens of the State must be considered.

With respect to improving faculty productivity in collegiate post-secondary education, some dramatic objective measures must be instituted lest many colleges find themselves either priced out of the higher education endeavor in the near future or forced to pass on to the taxpayer in increasing amounts the fiscal burden.

Collective Bargaining—The concept of collective bargaining refers to the negotiation between employer and employee which determines the terms and working conditions by which both parties are governed. Although a relatively new concept in terms of higher education faculty, it is likely to pose some problems for the management of higher education institutions.

There presently exist three national organizations vying for the power which accompanies the position of bargaining agent for faculty members in higher education institutions. The National Education Association (NEA), with more than 40,000 members, is the exclusive bargaining agent on 187 campuses. The American Federation of Teachers (AFT), with some 15,000 members, bargains for close to 80 campuses, and The American Association of University Professors (AAUP), which, although having the largest membership of near 91,000 members, only bargains for 16 institutions. This last organization has decided, however, to make collective bargaining a priority element in its program in the coming years. It becomes evident that collective bargaining will play a far more important role in the 1970's than heretofore, and that this role must be considered by the higher education community as it plans for the decade ahead.

This plan deals specifically with the concept of collective bargaining as it relates to the State University of New York, The City University of New York, and the private sector of higher education in New York State.

The State University of New York: In 1968, the Public Employees Relation Board (PERB) defined seven statewide negotiating units for all State employees. One of these units included all professional employees in the State University system covering 30 colleges and university centers. In 1970, more than 15,000 employees in the negotiating unit voted to retain the Senate Professional Association (SPA), an affiliate of the New York State Teachers Association (NYSTA) and the National Education Association (NEA), to be their negotiating agent. The Office of Employee Relations (OER), named as negotiating agent for the State by the Taylor Law, negotiated with the SPA, and a 3-year agreement was reached. It covered all teaching faculty and nonteaching professional staff in both central administration and on the University campuses on such matters as grievance procedures, retirement and dismissal procedures, leave benefits, and academic freedom. In the spring of 1972, the contract was reopened at the initiation of the SPA, and salary negotiations were effectively concluded.

The community college faculties are not a part of the negotiating unit represented by the SPA, but by law they bargain as a faculty association with the sponsoring agent.

The City University of New York: On September 15, 1969, the Legislative Conference, as bargaining agent for all full-time faculty in The City University of New York system, signed a contract with the Board of Higher Education of the City of New York. In April 1972, the Legislative Conference merged with the United Federation of College Teachers, which had represented lecturers and part-time teachers, into the Professional Staff Congress, bringing the total faculty represented to 16,000, the largest union local in the country.

Thus, the public sector of higher education bargains collectively with bargaining agents representing nearly 32,000 faculty members in New York State.

Private Higher Education: Union activity on private campuses began in 1970 when the National Labor Relations Board (NLRB) assumed jurisdiction over employment disputes in private institutions of higher education and then expanded this ruling to cover any institution with a gross income of \$1 million or more. St. John's University now has a contract negotiated by the AAUP and the Faculty Association of St. John's University. Long Island University's Brooklyn Center Campus has a contract presently being ratified. Many schools (Adelphi is an example) are presently voting on the issue of whether or not the faculty is to be represented by a bargaining agent. Some schools, such as Fordham, Pace, and Manhattan College, have recently held elections in which the unions were defeated, but the issue will be presented again next year.

Implications of Faculty Unionization

By 1980, institutions of higher education will employ 1 million academicians nationwide.⁸⁹ It is likely that many faculty members will believe it to be to their advantage to associate with some agency directly concerned with faculty welfare. Should this be so, it is wise to consider some of the possible resulting implications for higher education in the coming decade.

The governance of higher education institutions may require restructuring. Faculty participation in the decision-making process will materially increase, and it may prove necessary to develop

⁸⁹ Myron Lieberman, "Professors Unite!" Harpers, vol. 243:64, October 1971.

responsible mechanisms to accommodate their enlarged role in the governing process. This will require accommodation on the part of the State Legislature, the sector trustees, college administrators, and coordinating agencies.

Long-range financial planning must be initiated to handle the anticipated escalation in faculty costs to the higher education enterprise. Increased salaries and benefits have usually followed in the wake of organized labor, and it is only reasonable to expect that organized faculty may produce the same results. Higher education must plan ahead for this contingency lest it be unable to finance escalating demands for higher education by the State's citizenry. There will therefore be an increased interest in institutional accountability. To accommodate this charge, administrators, faculty members, and students must plan together to assess the goals and objectives of their institutions and develop mechanisms to measure the progress made toward their achievement.

The implications of faculty unionization for the governance and financing of higher education are acknowledged as important. The overriding concern, however, for teachers, colleges and universities, students, and citizens alike remains the effect this issue may have on the teaching/learning process. The primary responsibility of any professor is, and should always be, his or her commitment to education. Those considerations and improvements concerning personal welfare should be separate from academic considerations. Care must be taken by administrators, trustees, and particularly by faculty members to assure this separation.

The Regents therefore accept as viable some aspects of collective bargaining but believe that certain academic matters must remain outside the purview of negotiation. These include the following:

1. Academic tenure should be awarded to individual faculty members according to the process set by the bylaws of the institution. It is a process which involves the faculty, academic departments, and administration. Faculty should participate as an academic body and not as a collective bargaining unit.
2. Curriculum development and revision should remain the responsibility of the academic departments, departmental faculty, and the administration of individual institutions to insure high quality and relevance to institutional mission and goals.

3. The processes for faculty evaluation, promotion, and retention should be provided for in the bylaws and should be within the control of the governance structure of the institution. The processes should not be defined by the terms of a collective bargaining contract.
4. Student/faculty ratios and class size are and should remain a determination of the academic department and the administration in order to assure a responsiveness and flexibility to the varying needs and abilities of students and faculty members.
5. Administrative and/or academic organizational structure is a governance function.

The foregoing are matters of educational policy, essentially noneconomic and consequently nonnegotiable.

The traditional faculty participation in educational decision making is invaluable, desirable, and to be encouraged. An institution of higher education must be flexible and responsive to its constituency. The mandated process of collective bargaining is cumbersome, rigid, and unable, by its very nature, to make those administrative decisions crucial to the effective operation of a higher education institution.

Tenure

Academic tenure is that status which is granted to a faculty member by an institution, when satisfied with his performance, to make him a permanent member of the faculty. Upon the granting of tenure, the faculty member can no longer be arbitrarily dismissed from his position. The Regents endorse the concept of academic tenure, but agree with the American Association of State Colleges and Universities statement that "Tenure is not, nor should be intended as . . . a shield for mediocrity, incompetence or academic irresponsibility, and faculties at each institution should clearly and explicitly establish minimum levels of expected professional performance and responsibility and should enforce them impartially."⁹⁰

Traditionally tenure has had two primary functions: One as a protection for academic freedom; the other as a protection against arbitrary and unjust administrative action which would endanger a faculty member's economic security. But the right to academic freedom is not and should not be contingent upon tenure, and protection

⁹⁰ Statements on Academic Freedom and Responsibility and Academic Tenure adopted by the American Association of State Colleges and Universities in November 1971.

of a faculty member's economic security is not and should not be the prime reason for granting tenure. Tenure makes the teaching profession attractive to persons of ability, but essentially constitutes one important protection for academic freedom.

Tenure is thus designed as a permanent agreement an institution and a faculty member enter into after careful and lengthy consideration by both parties. The Regents, therefore, urge a reexamination of the probatory period before a tenure contract is decided upon by the parties involved. It is obvious that tenure should never be granted automatically at any specified time, but, rather, it should be contracted following a probationary period long enough for the faculty member to demonstrate his competence to meet or exceed the requirements of institutional standards.

The traditional concept of tenure is under serious challenge. Recently, there have been a number of cases regarding tenure brought before the courts by faculty members objecting to the fact that their contracts were being terminated after 1 or 2 years of work at an institution. In the past, it has been the prerogative of the institution to keep or not to keep such faculty members after 1 or more years of probationary employment. Those faculty members judged by the institution not to possess the characteristics necessary and compatible with the mission of the college have been terminated with no reasons given. The institutions have judged this to be their right. This is no longer acceptable to most faculty members. Those faculty members who have challenged this position have maintained that they have been deprived of property (their jobs) without due process (no reason given, or reasons given are not justifiable cause under the law) as guaranteed by the Constitution. In turn, they have gone to court. Some cases have been decided in their favor; others, in favor of the institution.⁹¹ In any case, little progress has been made toward a resolution of the issues. Hence, with the ferment surrounding tenure, colleges and universities would be well advised to establish reasonable, defensible, and objective guidelines for assessing and evaluating the potentials of prospective faculty members, for mistaken judgments could be costly to institutions should they decide not to retain a faculty member. Thus the Regents, although reaffirming their commitment to tenure as a concept to insure against arbi-

⁹¹ See especially the United States Supreme Court's decisions in *Roth v. Wisconsin State University-Oshkosh* and *Sindemann v. Odessa Junior College*.

trary dismissal of tenured faculty, would resist any attempt to make tenure an automatic right of a faculty member.

Not all faculty is or should be tenured. Some colleges and universities balance their faculty by maintaining 60 percent of their faculty as tenured and 40 percent as nontenured. The Regents believe this to be a reasonable ratio. The Regents also recommend that within departments, not more than 70-75 percent of the faculty be tenured. They also advise those institutions who do not already have guidelines for tenure to establish such guidelines. These guidelines should include goals and current faculty tenure proportions by faculty level and rank, procedures for the dismissal of incompetent tenure faculty, and should be reported in the institutions' 1974 progress reports.

While endorsing the concept of academic tenure, the Regents also recommend that each institution establish procedures for faculty evaluation. Institutions could be aided in this process by an evaluation committee comprised of representatives from various segments of the college community.

Recommendations

In order to maintain and assure a plentiful source of qualified faculty for New York State's higher education institutions through 1980, the Regents recommend that

52. all higher education institutions assure maximum remuneration and career advancement for excellence in the art and science of teaching
53. faculty members assume a major role in the implementation of innovations and flexibility in program design
54. departments within higher education institutions consider the desirability of sharing faculty through regional joint appointments
55. all higher education institutions in the State reassess their recruitment and promotion policies to assure that a truly diverse faculty be enlisted which will include qualified members of minority groups, women, and experienced practitioners from business, industry, and the cultural institutions of our society, and that they report their progress along these lines in their 1974 progress reports
56. faculty members assume that academic responsibility essential to academic freedom and that all higher education institutions establish procedures to assure faculty members due process of grievance when their academic freedom is challenged

57. guidelines for tenure, including goals and current faculty tenure proportions by faculty rank, sex, and ethnic identity, and procedures for the dismissal of incompetent tenured faculty be reported by all institutions in their 1974 progress reports
58. institutions investigate ways to increase faculty productivity as one way to increase the utilization of institutional resources
59. the faculty continue in its traditional role in academic matters in cooperation with the administration and that the following matters not be subject to collective bargaining:
 - a. Academic tenure should be awarded to individual faculty members according to the process set by the bylaws of the institution. It is a process which involves the faculty, academic departments, and the administration. Faculty should participate as an academic body and not as a collective bargaining unit.
 - b. Curriculum development and revision should remain the responsibility of the academic departments, departmental faculty, and the administration of individual institutions.
 - c. The processes for faculty evaluation, promotion, and retention should be provided for in the bylaws. The processes should not be defined by the terms of a collective bargaining contract.
 - d. Student/faculty ratios and class size are and should remain a determination of the academic department and the administration.
 - e. Administrative and/or academic organizational structure is a prerogative of the administration.

Unit 2: Libraries in Higher Education

The traditional role of the college and university library in New York State has been to support the academic goals of institutions of higher learning. Its chief functions have been the preservation, dissemination, and advancement of knowledge. Thus, its role has long been regarded by some as a passive one involving the storage and retrieval of the conventional bound-volume sources of information. In recent years, however, the resources and services of the academic library have come to play an increasingly active role in support of instruction, with the future holding more promise of the same. New trends in higher education are rapidly creating an environment which permits academic libraries to undergird the programs and curriculums of colleges and universities. In this new library environment, a

wide range of nonbook resources, such as video tapes, cassettes, and computer terminals must be available to improve the quality of a student's education, enhance his learning experience, and insure maximum levels of cooperative utilization of the available library resources of the State.

This unit clarifies the existing dimensions, both qualitative and quantitative, of college and university libraries of the State. Planning guidelines are examined and included in an analysis of projected needs. This analysis also includes cooperative mechanisms that encompass both libraries existing outside of the college walls and collegiate libraries. It recommends specific action to develop an economically feasible system of academic library development capable of meeting the diversified needs of the expected student population of the next decade.

Trends in Higher Education and the Implications for Libraries

Qualitative Analysis—In the past decade, innovations have brought a more individualistic pursuit of knowledge. This less formally structured search for knowledge, in which faculty serve in an advisory capacity and the student works independently in acquiring knowledge and skills, implies an obviously greater dependence on libraries. Diversification of programs as exemplified by the Empire State College, the University Without Walls Program, and the Independent Study Program of State University indicate the continuing growth of independent study. This concept of "universal access education"⁹² stresses the Regents conviction that a comprehensive post-secondary educational system will be developed to provide a learning continuum for all who qualify, at whatever age and for whatever length of time they wish to pursue it.

The movement away from rigid general education requirements in degree programs poses many challenges to the academic library. A greater range of materials must be available to encompass the diversified research requirements of individual program designs. This factor stresses the need to involve institutional librarians in the academic program development process so that appropriate materials can be made available when the need arises.

New developments in remote instructional systems through the utilization of computer networks, closed circuit television, and film require that new kinds of nonprint materials such as tapes, records,

⁹² See: Carnegie Commission on the Future of Higher Education, "New Students and New Places." New York: McGraw-Hill, 1971.

and video reproductions be available in college libraries. Thus, although academic libraries will and must continue to serve book-oriented learning and provide the written records needed for modern research, students will need "learning centers" of nonprint materials as well as reserve reading rooms and book stacks to gain access to the various new modes of materials dissemination.

Implementing the Regents specific objective of a 1980 in-State college-going rate of 70 percent will result in an influx of students, many of whom will need remedial assistance. College libraries will thus be required to significantly bolster their supply of remedial materials.

The large number of disadvantaged students entering colleges and universities will be in dire need of library user education. Thus, it will be essential that academic libraries provide special library counseling, instruction, and reading guidance.

To provide maximum amounts of library materials at a feasible cost, a program of coordinated collection development must be formulated among college and university libraries, not only on a regional basis but also on State and national bases. To support a coordinated acquisitions program, the Regents reaffirm their principle that each institution of higher education, public or private, be an active member of a Reference and Research Library Resources System (3R's) and make full use of statewide library services provided through programs such as the New York State Interlibrary Loan Network.⁹³ While the Regents acknowledge the need for coordinated library materials collection development, they also recognize that such development must follow coordinated academic curricular development which will be more readily achieved through regionalism in higher education.

Quantitative Analysis—This section encompasses a numerical examination of two main components of academic libraries: collections and staff. Comparisons of statistics for each component area among the various sectors of collegiate post-secondary education are generated to gauge the equity of the present materials distribution schema. Quantitative analysis of sector library resources also includes examination of staff and volume proportions to determine the rates of utilization found among both public and private collegiate

⁹³ Paraphrased from "The Regents Statewide Plan for the Expansion and Development of Higher Education, 1968," Albany, N.Y.: The University of the State of New York, March 1969, p. 31.

institutions. Ratio analyses are then used to project theoretical needs of these institutions through 1975.

Collections

Current Collections (1971)—As of 1971 there were 41,280,020 volumes⁹¹ in college and university libraries in New York State. Of this number 11,825,994, or 27.5 percent were in public college and university libraries, while 29,454,026 were in private college and university libraries.

The ratio of volumes to full-time equivalent students in 1971 was 33 volumes per student for the public sector and 112 volumes per student for the private sector.

4-Year Colleges and Universities

At the 4-year college level, including both public and private sectors, there were 38,852,573 volumes in academic libraries, with the public sector containing 25.0 percent and the private sector containing 75.0 percent.

The ratios of volumes to full-time equivalent enrollments at 4-year institutions were 47 volumes per student for the public sector and 115 volumes per student for the private sector.

The specialized nature and long existence of many private 4-year institutions, coupled with the usual emphasis on graduate research programs, represent some reasons for the disparities between the ratios of volumes-to-enrollment for the various sectors. The need is indicated, however, for developing coordinated mechanisms to increase accessibility of available resources to 4-year enrollments of both sectors.

The Regents Advisory Committee on Long-Range Planning for Academic Libraries in New York State has generated planning guidelines for 4-year college libraries.^{95 96} Data limitations prohibit analysis of these guidelines on a statewide level at this time, but institutions are encouraged to make use of the guidelines when planning their own library program development.

2-Year Colleges

At the 2-year college level there were 2,427,447 volumes in

⁹¹ A volume is a physical unit of any printed, typewritten, handwritten, mimeographed, or processed work contained in one binding or portfolio, hard-bound or paperbound, which has been classified, cataloged, or otherwise prepared for use. This includes bound periodical volumes.

⁹⁵ See appendix C, pp. 310-311.

⁹⁶ These long-range planning guidelines will be included in a position paper to be issued by the Regents.

1971, with the public sector containing 77 percent and the private sector containing 23 percent.

The ratios of volumes to full-time equivalent enrollments at 2-year institutions were 12 volumes per student for the public colleges and 53 volumes per student for the private colleges.

The liberal arts programs at the longer established private 2-year colleges justifies in part the proportionately larger collection sizes indicated. However, the important role that public 2-year institutions will play in implementing the stated Regents priority concerns for higher education concerning educational opportunity⁹⁷ dictates the continuing need for full regional integration of academic program development with library program development at the 2-year college level.

The Regents Advisory Committee on Long-Range Planning for Academic Libraries in New York State has generated planning guidelines for 2-year college libraries.^{98 99} Institutions of this type are encouraged to utilize these guidelines for future library program development.

Projected Collections (1975)—If present trends continue, the imbalance between college library collections and college enrollments among the sectors of higher education in the State will perpetuate itself. Projections for 1975 indicate that public collegiate institutions will enroll 374,100 full-time students or 61 percent of the expected State full-time enrollment. Concurrently, the number of volumes expected to be in libraries of public colleges and universities will increase to 16,488,335 in 1975 or 34 percent of the total volumes expected in all collegiate libraries in the State. The greater proportion of volumes, 66 percent, will be owned by private college and university libraries.

It is evident from the foregoing that a coordinated library planning endeavor must continue to be developed as an integral part of future higher education planning. A regional approach would avoid costly collections duplication and increase the accessibility of existing materials to a greater number of students. Such a regional planning approach is taking shape in the Regents effort to regionalize higher education in New York State.

⁹⁷ See *Regents Priority Concerns for Higher Education*: Nos. 1, 3, 5, and 8, pp. 343-346.

⁹⁸ See appendix C, pp. 310-311.

⁹⁹ These long-range planning guidelines will be included in a report to be published by the Regents.

Personnel Requirements

In order to accomplish the functions described in very general terms above, a wide range of professional and specialist talent and expertise is required. The core of any library must be the professional librarian trained in the process of acquiring, organizing, and expediting the use of recorded information.

In addition to the specialized skills of professional librarians, a long list of other competencies is important in certain situations. For example, libraries committed to automation programs will require systems analysts and programmers to devise and implement computer-based operating systems. In other types of institutions, especially junior colleges using a full range of technical aids to instruction, staff specialists in this area will be required. People with skills in communications such as the preparation of technical aids to instruction, the editing and preparation of manuscripts for publication, and photography are required in varying degrees by institutions in the State.

The central point is that library performance is dependent first on the degree and amount of professional competence available to an institution. It seems certain that no institution can realize the full educational benefits of its investment in library information sources until the highest level of professional expertise is available.

The thrust toward broader and more dynamic library programs in colleges and universities makes it imperative that sophisticated staff development programs be developed to encourage present staff members to expand their skills and their potential for service on a continuing basis.

It is equally imperative that the status of librarians in universities and colleges be carefully assessed to assure that the librarians are, in fact as well as in theory, full partners in the educational process.

The analysis of college and university library staff will include the examination of professional and nonprofessional personnel involved in operational and administrative capacities.¹⁰⁰ This section

¹⁰⁰ Professional library staff are graduates of accredited library schools and engage in tasks ". . . which require a special background and education on the basis of which library needs are identified, problems are analyzed, goals are set, and original and creative solutions are formulated for them, integrating theory into practice and planning, organizing, communicating, and administering successful programs of service to users of the library's materials and services."

Nonprofessional staff are supportive personnel engaged in clerical and other nonprofessional tasks.

includes the statistical examination of current staff personnel, generation of staff/volume ratios, and straight-line projections of staff based on these ratios for both the public and private sectors of higher education in the State.

Current Staff (1971)—As of 1971, there were over 5,822 college library staff members servicing over 471,000 students. Of this number, 2,224 or 38 percent were professional personnel.

Of the professional staff, 999 or 45 percent were in public college libraries and 55 percent were in private college libraries. The resulting professional staff/student ratios were one professional to 360 for the public sector, and one professional to 212 for the private sector.

Of the 3,598 nonprofessional personnel, 1,416 or 39 percent were in public college libraries and 2,182 in private college libraries. The resulting nonprofessional staff/student ratios were one nonprofessional to 254 students for the public sector and one nonprofessional to 120 students for the private sector.

Projected Staff (1975)—It is possible to project, utilizing these ratios and student projections for 1975, the following 1975 college library staff requirements for the various sectors: 1,045 professionals and 1,482 nonprofessionals at public colleges and universities, and 1,125 professionals and 1,941 nonprofessionals at private colleges and universities. The sum of the sector projections is a total expected State requirement in 1975 of 2,170 professional and 3,423 nonprofessional college and university library staff members representing decreases of 2.4 percent and 4.9 percent, respectively, over the 1971 staff totals.

Although planning guidelines are currently being developed for college library staff requirements,¹⁰¹ the predicted impact of the enlarging scope of college libraries with respect to academic program development and the subsequent increases in librarian responsibilities must still be considered. This impact will most likely manifest itself by increasing the staff requirements for 1975, which obviously will affect the validity of the stated staff projections.

Facilities

Library Planning Guidelines—Although a definitive library building program requires careful analysis and determination of spa-

¹⁰¹ The Commissioner's Advisory Committee on Long-Range Planning for Academic Libraries in New York State has appointed a subcommittee on manpower for the development of appropriate guidelines.

tial requirements for each of the many functions and services to be encompassed within a library structure, fairly accurate preliminary figures of total space requirements may be simply projected once campus population and collection growth estimates have been agreed upon.

The Future: A Comprehensive Cooperative System

One of the major concerns for the development of academic libraries across the State is the coordination of the various existing and planned consortia and library networks. This is mandatory to avoid duplication of effort and excessive costs. The scope of this coordination would include such functions as the regional establishment of bibliographic centers, interlibrary loan networks, delivery systems for the transfer of research materials of all kinds, and lists of serials. Component members of such a coordinated network would include the New York State Reference and Research Library Resources Programs, the New York State Interlibrary Loan Program, the New York State Library, the New York Public Library, all college and university libraries, and other smaller specialized consortia. This approach would insure rapid access to research library materials at a cost which will be feasible for the State.

Inherent in the development of a regionalized comprehensive statewide academic library system will be the increased application of technological innovations such as computer networks, telecommunication, video cassettes, and facsimile transmission. Development of an automated system at each institution is, however, in most cases fiscally infeasible. A system of regional networks with remote terminal access thus presents itself as the most viable approach to library data sharing.

Recommendations

60. With respect to academic libraries, the Regents recommend

Regionalism

- a. that where 3R's regions and higher education planning regions are not coterminous, effective interface be achieved by insuring that the Regents advisory councils in the higher education regions make full use of the expertise that has been developed in the 3R's Systems through their representation on these councils and the relevant task forces
- b. that appropriate utilization be made of the resources of all types of libraries—public, industrial, research, hospital and

medical, and the museum libraries that make up the membership of the nine 3R's Systems—to meet the regional post-secondary educational needs of the State

- c. that librarians be included on advisory committees related to higher education at State, regional, and institutional levels
- d. that the device of contract between 3R's Systems and regional associations of institutions of higher education be exploited.

Resources and Services

- a. that the higher education regions, jointly with the 3R's Systems, designate certain libraries and/or collections of strength as resource libraries that will be available to all students and faculty in institutions of higher education in the regions. Such designated libraries should receive appropriate compensation for serving a regional role.
- b. that every institution of higher education have a library that meets threshold adequacy as regards resources, staff, and facilities. Therefore, the Regents recommend in principle that the guidelines developed by the Advisory Committee on Long-Range Planning for Academic Libraries in New York State become the standards for all academic libraries in the State. While interlibrary cooperation through the 3R's Systems and regionalism is encouraged, it is recognized that the effective use of the concept of shared resources and facilities will be eroded if individual institutions do not have basic resources and facilities on site.
- c. that academic institutions provide special library instruction and counseling for students needing remediation
- d. that effective use be made of all media and instructional technology including the development of an information retrieval and dissemination system when such methodology serves program objectives
- e. that as joint curricular development evolves, so should joint acquisitions programs be developed among institutions of higher education. This should be fostered through the ongoing joint acquisitions committees of the 3R's Systems
- f. that the State enact legislation in support of reference and research library service as recommended by the report of the "Commissioner's Committee on Reference and Research Library Resources (1961)" and the "Major Recommendations of the Regents for Legislative Action, 1972." Such legislation would provide support for the 3R's Systems and for State level programs including research collection development, NYSILL, etc.
- g. that, in recognition of the vitally important role of the Research Libraries of the New York Public Library in the

total library network of the State and of the key role the library plays in the support of academic library service including the State University of New York, The City University of New York, and the private colleges and universities of New York, the State increase its support for the Research Libraries of the New York Public Library to enable it to continue and to strengthen its support services such as catalog and other bibliographic assistance to the academic and research libraries of the State.

Unit 3: Physical Facilities in Higher Education

This section (1) examines and describes existing physical facilities of higher education within New York State, (2) indicates planned physical facilities to be constructed by 1980, (3) evaluates the extent to which existing and planned physical facilities are adequate to meet the higher education needs by 1980, and (4) proposes means for more efficient utilization of these facilities on a statewide basis. All higher education facilities are classified with respect to function, condition, and utilization to identify and correct in the most economical fashion any inequities in their present usage. This will allow enrollments projected for 1980, as a result of Regents policy decisions, to be accommodated with a minimum of new construction—an important issue in times of inflated bond rates, “tight” money, and a future decline in the traditional college-age population.

Inventory of Existing Facilities

The State of New York, funded by a Federal grant,¹⁰² undertook its first complete inventory of all existing facilities on all campuses of degree-granting institutions in fall 1967. Facilities data received from all 214 New York State institutions of higher education described all buildings in two types of categories: (a) building characteristics—the number, name, history, design, characteristics, condition, cost of estimated value, and gross area of all buildings pertaining to higher education, and (b) room characteristics—the specific room type (classroom, laboratory, office, etc.), the organizational unit which occupied the space (instruction and research, general administrative, etc.), the function of the space, the number of stations in the room (where applicable), and the net usable square footage contained within each room or space for all buildings listed on the

¹⁰² Per section 3 of the Higher Education Amendments of 1966 applied to the Higher Education Facilities Act of 1963 (U.S. Public Law 88-204).

building characteristics report form. Since the initial inventory, there have been annual updates supported by Federal funds.

Description—1970

In the fall of 1970, the institutions of higher education in New York State occupied 153.6 million gross square feet of space valued at \$4.3 billion. Seventy-eight percent of the space was constructed between 1900 and 1967, with 87 percent of the total facilities deemed satisfactory by their owners, 10 percent considered in need of rehabilitation, and 3 percent described as needing to be razed. Of the 153.6 million gross square feet in 1970, 92 million, or 60 percent, were in the private sector and 61.6 million gross square feet, or 40 percent, were in the public sector.

A more meaningful measure for examination and analysis purposes is the net assignable square footage (NASF)—the usable floor area contained within building structures. In 1970, the total amount of net assignable square footage in colleges and universities of the State was 95 million square feet, or 61.8 percent of the 153.6 million gross square feet. Of this assignable footage, 60.5 percent, or 57.4 million net square feet, were in the private sector and 39.5 percent, or 37.5 million net square feet, were in the public sector. A comparison of these figures to the 1970 full-time equivalent enrollments of the various sectors shows that, although the private institutions occupied 60.5 percent of the total net assignable square footage, they enrolled only 42.7 percent of the State's total full-time equivalent enrollment—an imbalance which should be investigated before additional construction is undertaken.

Present Utilization of Facilities

Two approaches were used to determine the degree to which the higher education physical facilities are presently utilized in New York: (1) An examination was made of the overall net assignable space used by each sector in relation to its enrollment (which provided a gross indication of the utilization of overall space by sector), and (2) an examination was made of the utilization of the classroom space for each sector in relation to the space planning factor for classrooms as approved by the Regents in November 1970 as an amendment to the "1968 Regents Statewide Plan for the Expansion and Development of Higher Education."¹⁰³

¹⁰³ See appendix D, pp. 312-314.

Classroom space was selected and examined in relation to the Regents-approved space factor ¹⁰⁴ because it is considered the most essential in meeting the instructional needs of the students. While space factors have been developed and approved for some types of class laboratory, library, and academic office space, existing information does not permit comparable analyses for these uses; only classroom space factors can be meaningfully analyzed.

Utilization of Overall Space—Net assignable space less residential space is first examined in relation to two enrollment measures: full-time equivalent students and full-time students. Figure 3 shows the net assignable space footage per full-time equivalent student for each sector. State University of New York and the private colleges operated at approximately the same levels, 141 and 148 NASF per FTE, respectively. City University, however, operated at only 49 NASF per FTE, approximately one-third of that at the State University and private institutions and almost equal to the community college level of 50 NASF/FTE. Clearly, measured in terms of full-time equivalent enrollment, there appears to be either a relative shortage of space at City University or underutilization in the other sectors.

Figure 4 depicts the same analysis relative to full-time enrollment with the part-time student population factor removed. On this basis, State University and private institutions are again in the same utilization range, 156 to 170 NASF per full-time student while City University operates at 62 NASF per full-time student. Again, the relatively higher utilization of space at City University is evident.

Utilization of Classroom Space—Classroom space is examined because of its absolute necessity in meeting the demands of student enrollments. The measure of evaluation used is the net assignable square footage of classroom space per weekly student hour in classrooms (the number of hours per week students are in a classroom). The space factor approved by the Regents for classroom space ¹⁰⁵ was used as an overall measure of the adequacy of utilization of classroom space per sector. While this factor cannot be used as an absolute standard for analyzing the specific use made of classroom space, it does provide a useful tool for interpreting the utilization data gathered.

Figure 5 shows the net assignable square footage of classroom

¹⁰⁴ Classroom space factor = .89 net assignable square feet per weekly student hour (WSH).

¹⁰⁵ See appendix D, pp. 312-314.

| | |
|--|------------|
| 1970 NASF Less Residential (Sq. Ft.) | |
| TOTAL STATE | 65,217,200 |
| PRIVATE | 36,770,300 |
| SUNY | 18,290,600 |
| CUNY | 4,403,200 |
| COMM. COLL. | 5,753,100 |

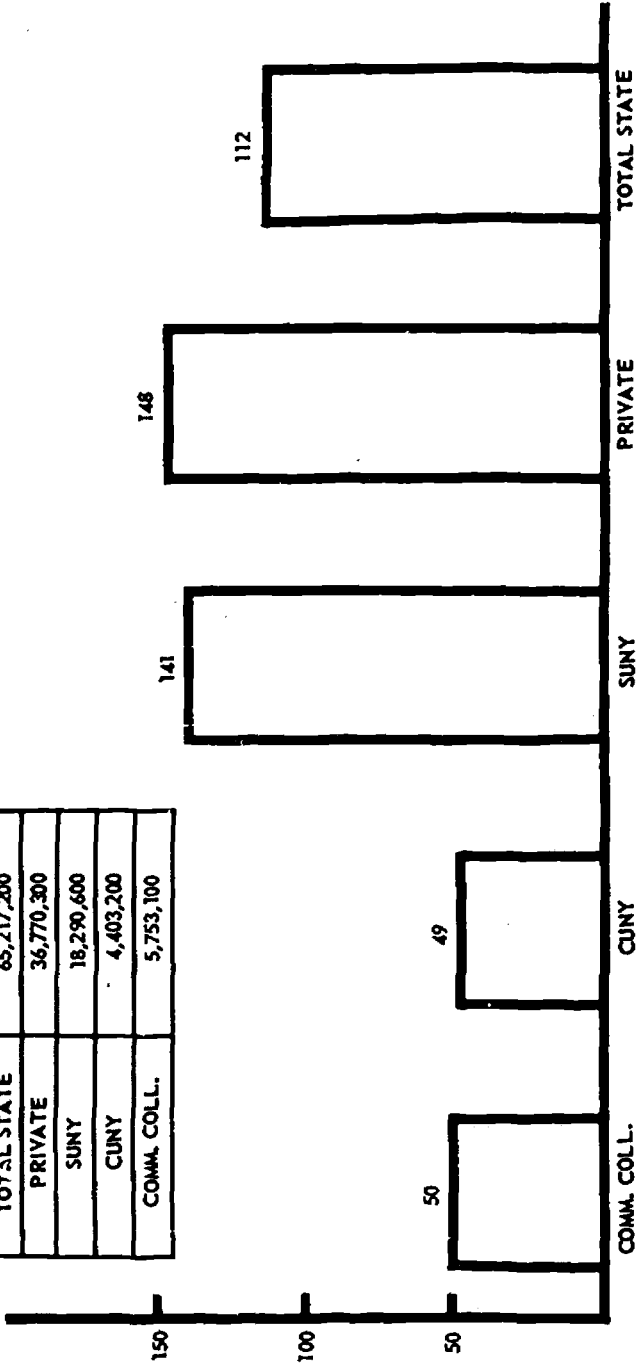


FIGURE 3. NET ASSIGNABLE SQUARE FOOTAGE OF SPACE (LESS RESIDENTIAL) PER FULL-TIME EQUIVALENT STUDENT BY CONTROL OF INSTITUTION, 1970.

| | 1970 NASF Less Residential (Sq. Ft.) |
|-------------|--|
| TOTAL STATE | 65,217,200 |
| PRIVATE | 36,770,300 |
| SUNY | 18,290,600 |
| CUNY | 4,403,200 |
| COMM. COLL. | 5,753,100 |

3

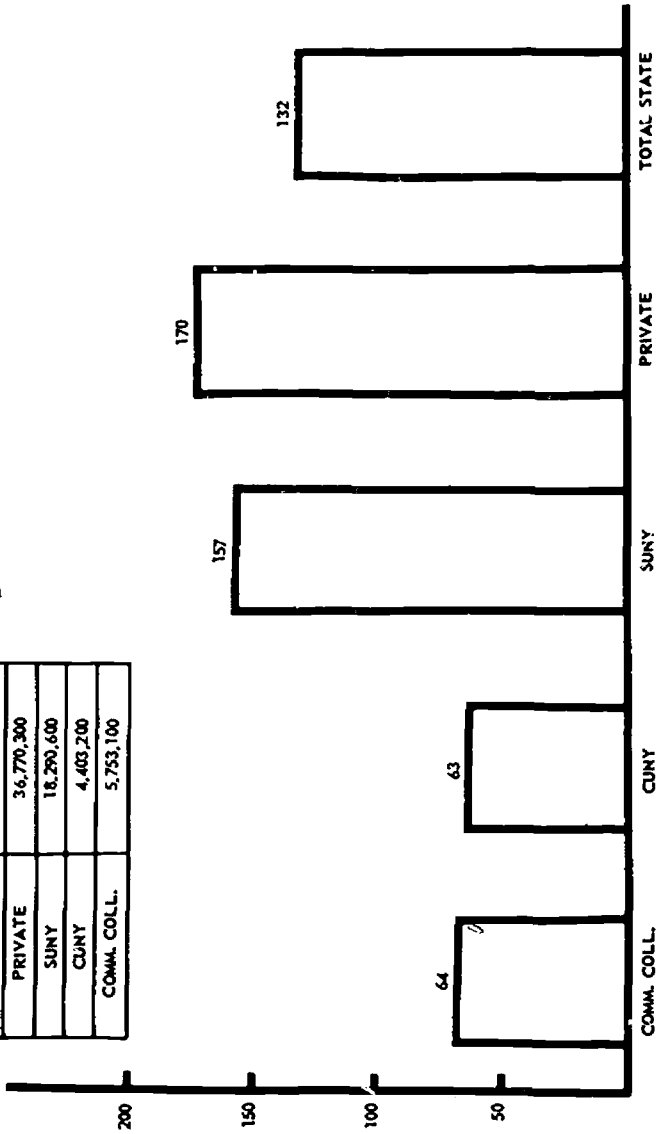


FIGURE 4. NET ASSIGNABLE SQUARE FOOTAGE OF SPACE (LESS RESIDENTIAL) PER FULL-TIME STUDENT BY CONTROL OF INSTITUTION, 1970.

NET ASSIGNABLE SQUARE FOOTAGE OF SPACE (LESS RESIDENTIAL) PER FULL-TIME STUDENT

| | 1970 NASF Classroom Space |
|-------------|------------------------------|
| TOTAL STATE | 7,589,600 |
| PRIVATE | 4,294,300 |
| SUNY | 1,599,200 |
| CUNY | 674,400 |
| COMM. COLL. | 1,021,700 |

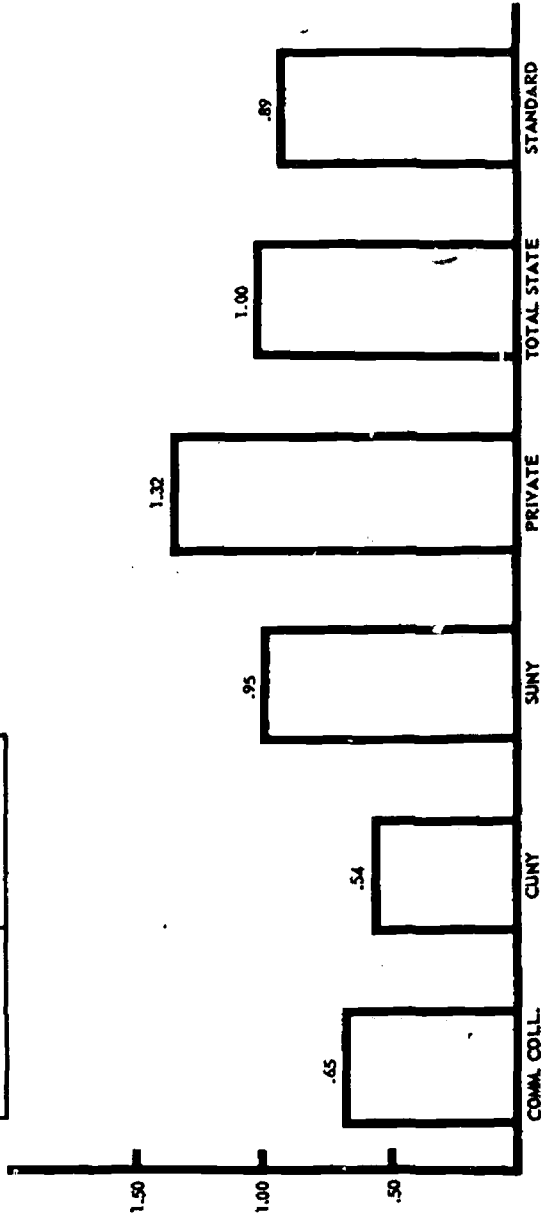


FIGURE 5. NET ASSIGNABLE SQUARE FOOTAGE OF SPACE IN CLASSROOMS PER WEEKLY STUDENT HOUR.

NET ASSIGNABLE SQUARE FOOTAGE OF SPACE IN CLASSROOMS PER WEEKLY STUDENT HOUR

space per weekly student hour for each sector. State University, with .95 NASF per WSH, operates within reasonable ranges of the approved factor. In contrast, City University operates with .54 NASF per WSH, less than two-thirds of the approved factor. Evidently, the overall space shortage at City University is partly due to inadequate classroom space. In contrast to City University, the private institutions operate at a level of 1.32 NASF per WSH, 48 percent over the standard. If .89 NASF per WSH is an acceptable classroom utilization rate, these findings indicate that increased enrollment could be accommodated in private institutions without overcrowding in classrooms. To further support this point, a survey of member institutions by the Commission on Independent Colleges and Universities reported that they had space for over 55,000 additional students¹⁰⁶ in fall 1972.¹⁰⁷

Utilization of Class Laboratory Space—The Regents Space Factors Committee has established planning standards for various kinds of class laboratories operated by higher education institutions in the State.¹⁰⁸ The standards development for a number of class laboratory types is still in process. Thus, a comparative examination will be made of the total amount of class laboratory net assignable square feet per weekly student hour in class laboratories for each sector (see figure 6). Although there is considerable individual variation between established factors and actual sector utilization rates, combining the class laboratory space into totals presents generally the overall situation in 1970.

The private sector, with 7.6 net assignable square feet per weekly student hour in class laboratories, is 43.4 percent above the State average of 5.3 square feet per weekly student hour, indicating an underutilization of existing class lab space. The State University (with 4.5 net square feet per WSH), The City University (with 3.3 net square feet per WSH), and the community colleges (with 2.8 net square feet per WSH) are all well below the State average, suggest-

¹⁰⁶ Represents additional enrollment as defined by optimal space utilization. It assumes ideal distribution among academic levels (freshman, sophomore, etc.) and academic programs. The actual number of additional students which could be accommodated by the private sector in a single year (1972) is in reality constrained by program stability factors and thus the 55,000 students should be established as a goal with yearly distribution mechanisms to be developed.

¹⁰⁷ See appendix A, table 29, p. 297.

¹⁰⁸ See appendix D, pp. 312-314.

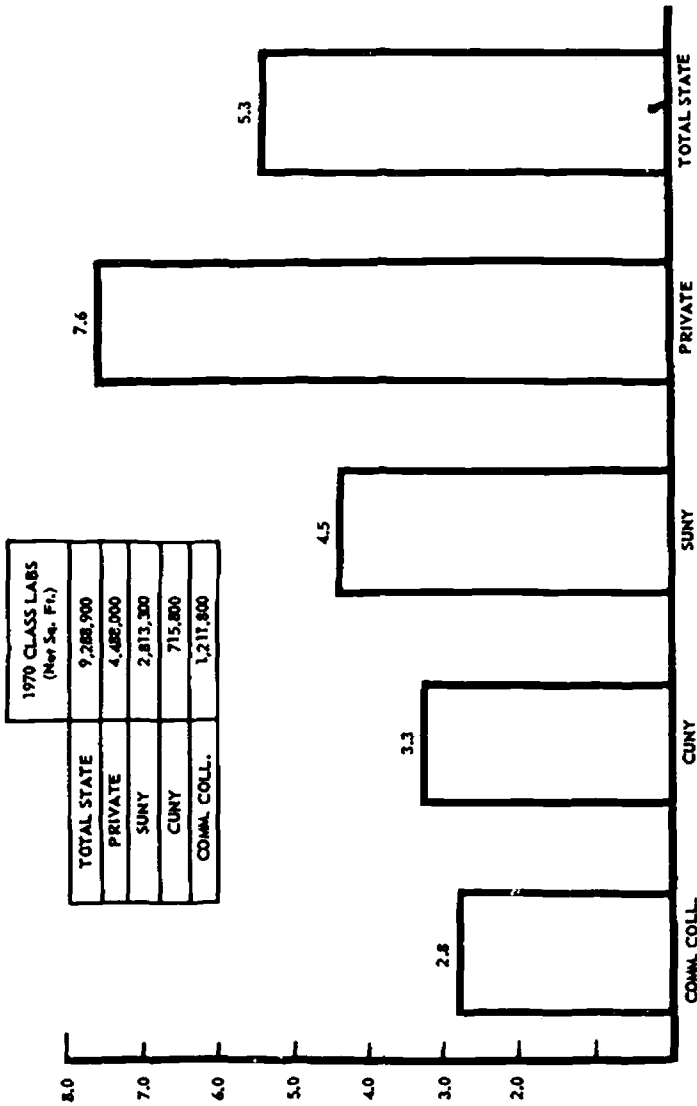


FIGURE 6. NET ASSIGNABLE SQUARE FOOTAGE OF SPACE IN COMBINED CLASS LABORATORIES PER WEEKLY STUDENT HOUR BY CONTROL OF INSTITUTION, 1970.

NET ASSIGNABLE SQUARE FOOTAGE OF SPACE IN COMBINED CLASS LABORATORIES PER WEEKLY STUDENT HOUR

ing that the entire public sector has had to overutilize its existing class laboratory space.

Thus, imbalances exist in class laboratory utilization among the sectors. To detail the inequities and to compare sector utilization to established space factor standards, significant amounts of data will need to be analyzed pertaining to class lab utilization by specific laboratory type (life science, behavioral sciences, etc.).

Planned Facilities

The initial information in this unit has provided descriptive data on existing facilities, especially classrooms. The data which follow provide information on planned facilities, many already in the construction phase. The projections given here are limited to classroom net square footage and extend only through the 1975-76 academic year.

Classroom space projections are examined since they provide the best comparative measure of space utilization on a per student basis. While overall space needs will vary from campus to campus depending on the type and location of an institution, and the number and size of specialized facilities (gymnasiums, libraries, performing arts centers), all institutions share a common need for classroom space. Also, there is a clearly defined Regents planning standard for classroom space of .89 net assignable square feet per weekly student hour which can be compared to sector plans as a utilization standard.

Classrooms

The State University State-Operated Institutions—The State-operated institutions are expected to increase their classroom net assignable square footage from 1.6 million square feet in 1970 to almost 2.1 million square feet in 1975, an increase of 31 percent. The classroom net assignable square footage available per weekly student hour¹⁰⁹ will increase from .95 to .99. This compares satisfactorily to the Regents standard for classroom space.

Community Colleges—The community colleges, excluding the New York City community colleges sponsored by the Board of Higher Education, are expected to increase classroom net assignable square footage from 875,000 in 1970 to an estimated 919,500 net square feet in 1975. The resulting net assignable square footage

¹⁰⁹ Assumption: Full-time student = 15 weekly student hours.

available per weekly student hour will decrease from .76 to .74.

The community colleges sponsored by the Board of Higher Education in New York City had 314,000 net assignable square feet of classroom space in 1970 for 29,400 full-time students, or approximately .71 NASF per WSH. The facilities expansion plans of these institutions have historically been affected by funding constraints. A 1972 amendment to State law¹¹⁰ provides a new funding mode for facilities construction through the City University Construction Fund/Dormitory Authority, the route now used for City University colleges. The quantitative (classroom square feet) implications of this funding change have yet to be determined, but the Regents expect that the \$400 million ceiling established by the Legislature will provide adequate facilities expansion for the expected student population.

City University—By every measure of comparative space utilization described earlier, City University colleges have the least amount of space per student. In 1970, there were 675,000 net assignable square feet of classroom space for 70,600 full-time students, or approximately .64 NASF per weekly student hour. Because fiscal considerations constrain construction at City University colleges, and a 48.7 percent increase in full-time enrollments is expected between 1970-75, classroom space will obviously continue to be inadequate.

Private Institutions—Private institutions plan to expand their classroom net square footage from 4.3 million in 1970 to approximately 6.1 million in 1975, an increase of 41.9 percent.¹¹¹ The resulting NASF per WSH ratio will increase from 1.32 to 1.70. These utilization rates are far above the Regents standard (.89 classroom NASF per WSH) and would result in further underutilization of classroom space by private institutions.

Evaluation of Overall Facilities Needs

The State University—The facilities which the State University has and is planning to construct appear to be reasonably well utilized, and therefore, the Regents believe the size and direction of the State University's construction program to be prudent. The Regents

¹¹⁰ See chapter 464, Laws of 1972, New York State.

¹¹¹ The estimates of 1975 net assignable space for the private sector were based upon an extensive sample of 101 institutions representing approximately 86 percent of the 1970 net assignable classroom space. To compare sector utilization of classroom space, the trends indicated by the expansion plans of the sample institutions were assumed for the overall sector.

hope, however, that the State University will continue to seek out ways to further improve space utilization such as extending course scheduling hours and revising the academic year, thus improving its position in a future of anticipated funding constraints.

The City University—In reviewing the facilities needs of The City University, the Regents note the recommendation of their New York City Regional Advisory Council calling for a controlled extension of the senior college construction program. For broad planning purposes, the Regents believe a goal of 12,500,000 total net assignable square feet, or 100 NASF/FTE is a reasonable parameter to use in describing the needs of the construction program. In reviewing individual senior college campus plans, the Regents will be guided by the overall parameter. Each campus plan will also be reviewed by the Regents in relation to the college's enrollment goals and academic purpose.

Notwithstanding the construction goals or the individual campus plans approvals, the Regents recognize that financial constraints will preclude The City University from authorizing more than \$520 million in senior college construction within the period ending June 30, 1976.

The Regents expect, therefore, that The City University will identify individual facilities priorities within these constraints:

1. that overall space of the senior colleges not exceed 100 NASF per FTE student
2. that no construction take place unless authorized in campus master plans approved by the Regents and the Governor
3. that no more than \$520 million be authorized for senior college construction prior to June 30, 1976, based on estimates of University income available for construction and of appropriate outstanding obligations.

The Regents also expect that the \$400 million funding ceiling established by the 1972 Legislature will be sufficient to meet the projected facilities needs of the community colleges in New York City sponsored by the New York City Board of Higher Education.

Private Institutions—The Regents are cognizant of the need for private institutions to provide specialized facilities resulting in space utilization rates lower than the public sector. They believe, however, that the present expansion plans of private institutions are unrealistic

in the light of present and proposed classroom utilization rates and the optimistic enrollment levels upon which the facilities plans are based. The Regents are concerned that the resulting debt service and maintenance burdens will draw needed funds from educational programs, and heavy plant maintenance commitments will threaten the survival of many of the institutions.

Currently, many areas of underutilization of space exist in this sector, which must be remedied before new construction can be recommended. The Regents, therefore, *urge* that private institutions limit their construction to essential projects and recommend that trustees of these institutions approve only the most critical projects, regardless of whether they are financed by private donation or by subsidized borrowings.

Conclusions

The conclusions drawn from this section are as follows:

1. The City University has substantially less physical facilities space per student than have the State University or the private institutions.
2. Private colleges, in comparison, have a substantial amount of underutilized classroom space.
3. If facilities construction plans for 1975 are carried through by the various sectors and the same student allocation trends exist through 1975 (with declining enrollments continuing in the private sector and increasing enrollments continuing in the public sector), the same inequitable patterns of facilities utilization among the sectors will continue to exist in the future.
4. Unless new mechanisms are developed for utilizing the higher education facilities that exist in the nonpublic sector in the State, there will be a pressing demand to add to the existing facilities in the public colleges to meet the educational demand of those who require education beyond high school.

Recommendations

Based on the inventory data on physical facilities of higher education institutions in New York State and work done by the Space Factors Committee, the Regents recommend the following:

61. comprehensive long-range facilities planning be continued

- at all levels in order to forestall the construction of new buildings when existing facilities can be altered to serve the same purpose at a lesser cost
62. the Space Factors Committee continue to develop space factors that can be used to assess the amount of space available in the State, to determine how it is utilized, and to assess proposals submitted for approval of new facilities
 63. the Dormitory Authority continue to exercise restraint in the authorization of new facilities construction in the non-public sector, especially if they expand capacity, and that the Authority continue to seek the advice of the Commissioner regarding academic need
 64. the State University of New York seek out ways to further improve space utilization of its facilities including year-round academic calendars and conversion of unused dormitory space to faculty office or instructional space
 65. The City University of New York identify individual senior college facilities priorities within these constraints:
 - a. that overall space of the senior colleges not exceed 100 net assignable square feet per full-time equivalent student
 - b. that no construction take place which is not a part of a master plan approved by the Regents and the Governor
 - c. that no more than \$520 million be authorized for senior college facilities expansion prior to June 30, 1976, based upon estimates of university income available for construction and of appropriate outstanding obligations
 66. private collegiate institutions reexamine their facilities plans, investigate ways to increase space utilization (including year-round academic calendars and conversion of unused dormitory space), and limit construction to essential projects
 67. a student allocation model be developed which will identify alternatives for reducing the disparities among sector space utilization rates

Unit 4: Institutional Management

Higher education institutions can do much more than they have in improving the efficiency of their education programs. During the past decades of expansion, institutions concentrated their resources on meeting the increasing demand for educational services. Although meeting educational demands is still paramount, institutions in the next decade will survive or fail depending on their ability to manage effectively and to control costs. The Carnegie Commission has recently recommended a 20 percent reduction by 1980 in the total an-

nual expenditures by colleges and universities.¹¹² If this goal is to be approached in an atmosphere of widening education options, skillful management at all levels will be necessary.

A comprehensive planning-management system is essential for effective and efficient operations, and each institution is strongly encouraged to establish such a system. Cost measurement and control systems must be key elements in the overall system. The Regents urge institutions to participate in the federally funded Planning Management System Program of the National Center for Higher Education Management Systems in order to guide their efforts in this area.

Faculty Productivity

While it is inappropriate for the Regents to design a measurement device or to specify performance standards for faculty productivity, they do believe increases in faculty credit hour and contact hour loads are essential. This will facilitate the control of salary expenses while providing education to more students.

Faculty productivity can be achieved without reducing educational quality. The Regents suggest several possibilities for consideration.

1. The diversity of strengths of individual faculty members should be recognized by the institution. Management must recognize, within the context of its goals, a wider range of faculty talent and performance measurements rather than adjudicating solely on a basis of publication and research records. Uniform workloads which fail to differentiate among the varying responsibilities of different faculty members are both inequitable and wasteful. Faculty members whose primary commitment is to teaching should devote maximum time to this function, and should be relieved of pressures to produce research in order to qualify for promotion or tenure. On the other hand, faculty members who are research oriented, or who are expected to conduct research as a significant part of their function, should be allowed sufficient time for such activities. Institutions should seek to strike a balance among the number of faculty committed to consulting, teaching, research, and institutional support activities. This should also apply to the distribution of individual faculty member's workload. Such a balance can be maintained through specific policies on recruiting, academic chair arrangements, tenure and the

¹¹² American Council on Education, Washington, D.C., vol. XXI, No. 24, June 16, 1972.

tenure-to-nontenure ratio, promotion, sabbaticals, research grants, and remuneration policies. Institutions should consider distinguishing between research professors and teaching professors and hold each accountable in terms of their appropriate contributions. The value to the institution of allowing and encouraging institutional support and consulting activities should be examined within the context of the institution's goals and resources.

2. More effective management of course scheduling and course offerings represents one of the most significant areas for increasing faculty productivity. While some courses need to be offered to small numbers of students, institutions should not schedule multiple sections of the same course with relatively small enrollments without a sound educational rationale. Institutions are encouraged to review course offerings and course schedules to minimize the number of sections that fail to attract adequate enrollments. They are further encouraged to eliminate programs of study which fail to attract sufficient enrollments to justify the breadth of courses required.

Through special agency arrangements or jointly sponsored programs, institutions should cooperate on a regional basis so they can offer programs in small enrollment fields to economic numbers of students.

3. Institutions are requested to recognize and accredit past learning gained through credits from other institutions, through independent study, or through work experience.
4. Institutions should identify and maintain a tenure-to-nontenure ratio that appropriately protects younger as well as more experienced faculty members and permits institutions to attract new faculty members each year without resulting in overstaffing.
5. Movement toward a full 12-month calendar, the restructuring of the length of objective-oriented courses around material content rather than around semester length, and orientation around a full-day schedule are tactics that could be used in the more intensive employment of faculty skills and facilities.
6. The Regents urge institutions to devise and implement means of relating faculty productivity to faculty salaries so that costs tend to be stabilized at, or close to, current levels. The Regents look to higher faculty/student ratios during this next decade.
7. They expect that efforts will be made to reduce the time needed to learn and thereby economize on student and faculty time. This could include the evaluation of innovative learning and teaching devices and methods.

Administrative Staff

Administrative staff should be distinguished from the instructional staff in terms of rights, talents, and responsibilities. A tenure system is designed to protect the academic freedom of instructional staff members and should not be subverted into a job protection system for administrators. The complexities and constraints of college management suggest the need for highly trained portfolio managers, facility coordinators, purchasing agents, financial officers, labor contract negotiators, and counselors.

Institutions should rely less upon teaching and research faculty as a valid labor pool for many administrative positions. While the faculty work year traditionally follows the academic calendar to permit time for research and professional study, the work year for administrators should follow the practice of administrators in other nonprofit institutions. This would clarify the distinction between educational goals and business goals.

Facilities and Construction Needs

The units describing enrollment growth and physical facilities identify the need for restraint in new plant commitments. They identify underutilization of physical plants in the private and some of the public sectors. This factor coupled with the high cost of building maintenance, the increased indebtedness to fund construction, and the probability of the imposition of community service charges, has appreciably increased the per student cost of facilities.

Part of the responsibility rests with governments which have encouraged major facilities expansion during this past decade of rapid enrollment growth. Another portion of the responsibility rests with institutions which have concentrated their fund-raising activities on new construction rather than on endowment of educational programs.

The Regents urge that institutions seek to utilize their education plants more fully, defer new construction plans unless the plan is essential for continued operation, and shift fund-raising activities to programs supporting student and educational activities. Twelve-month calendars, interinstitutional lease arrangements, the abandonment of inefficient facilities, multiple use arrangements, and joint ownerships are all alternate tactics to be entertained.

Endowments and Noneducational Assets

Given the goals of the institution, especially as they pertain to

the local community and to society, institutions should seek professional administrators who are qualified and oriented toward maximum profitability within an investment risk class. For institutions with smaller endowments and short-term investable funds, contracting for outside professional management should be considered.

As well as properly managing conventional securities, many real property assets should be properly treated as investments. Land, buildings, and residential properties that play no part in the realistic long-range plans of the institute should be measured against conventional standards of profitability. Maintenance costs should be charged to investment rather than to facilities accounts. These assets should be included in calculating the desired balance between income and capital gains vehicles.

Equipment

Many efficiencies are feasible within educational regions with respect to the acquisition and maintenance of equipment. Shared use of expensive laboratory and computing equipment and interinstitutional scheduling for the use of movable equipment can become reasonable alternatives. Within the realities of geography and technology, joint ownership contracts could be authored. Interinstitutional telecommunications networks could be used for library access or for capitalizing on faculty skills and equipment. The State and regional educational managers have the responsibility for guiding the institutions toward funding agencies that will facilitate private-public cooperative agreements.

Students

An institution's student body represents one of its most important sources of funds, not only for tuition and for the inflow of State and Federal money that their attendance can stimulate, but also for their later commitment as alumni. By establishing sound programs to aid students in applying for available funds, the institution cannot only ease the student's financial burden but can also alleviate the pressure on funded and nonfunded internal aid programs. Professional counseling and job placement staffs would do much to enhance student attitudes toward future fund requests.

Information systems should contain extensive regional and institutional submatrices to facilitate the evaluation of student characteristics, performance, and finances.

Aggressive tuition and fee payment policies would remove the

institution from short-term student financing activities and accelerate the cash flows of investable funds.

State- and Regional-Level Management and the Private Sector

With the realization that the functions of the private and public educational sectors are essentially identical, the State must reorient its funding priorities. Specifically, a reallocation of resources at the State level is essential to the preservation and strengthening of the private sector.

While it may be reasonable to contend that students electing to study at a private institution should pay a premium for the option, it is apparent that "penalty" may be a more descriptive term for the future. If the Regents goal of affording each student the educational opportunity he needs and *desires* is to have substance, the excessive tuition differential will have to be lessened. Given a certain minimum level of education costs per student and a constant State budget, it is apparent that student-derived revenues must be adjusted to allow re-channeling of tax revenues. This redirection might include general and categorical institution aid and meaningful student aid.

While the maintenance of elements of the nonpublic sector is probably most contingent on realistic planning and management at the institutional level, the Regents and regional bodies must develop a pragmatic approach to the funding of institutions that cannot be economically maintained in a competitive posture. Rather than watch certain institutions slowly expire, with tremendous losses through the dissipation of faculty, books, equipment, and physical plant and with the sunk costs of present State and Federal aid, the Regents recommend that planned consolidation occur. Mechanisms for evaluation of data and detection of failure patterns must be developed. By acknowledging the inevitable, smooth transfers of staff, faculty, and assets can be planned and executed.

At the regional level, programs must be consolidated. This could range from designing programs with a common lower level core offered at several schools in a region and with upper level specialties offered only at one or two schools, to completely abandoning high-cost, low-output programs at certain institutions. An institution must isolate those programs essential to the preservation of its unique character. Those that could feasibly be abandoned or offered jointly should come under strict review. A particular area of emphasis may be the balance between graduate and undergraduate pro-

grams guided by an appraisal of the relationship between program maintenance costs and the real benefits derived. The value of institutional prestige and the quality of the contribution to the field of knowledge must be examined. Knowledge of the regional pattern of programs and of the student population will aid in suggesting alternatives.

Realistic interinstitutional cooperative programs could provide higher quality education with greatly increased utilization of staff and equipment.

The Regents recommend that

68. institutions design faculty assessment and reward devices that will encourage the growth of a faculty mix appropriate to the goals of the school and to its resources
69. institutions individually and jointly within regions review low enrollment courses and programs and take steps to eliminate or consolidate those that are not essential
70. institutions seek out and implement new ways of increasing faculty productivity and lessening the time required for learning; institutions consider reorienting schedules around a 12-month year and around the material content of courses; and that efforts be made to establish flexible devices for the recognition of nonconventional past learning. Institutions should have concrete steps in process in these areas for inclusion in the 1974 progress report
71. institutions critically review their administrative staffing and operational procedures to insure more efficient resource utilization with particular emphasis on facilities and equipment
72. the State recognize, with a resource reallocation, the contribution of the private sector in providing diverse types of educational opportunities; that the State take immediate steps toward lessening the differential in net costs to students of attendance at public and private colleges and universities.

Unit 5: Financing Collegiate Post-Secondary Education in the Seventies

In this unit the Regents set forth a long-term plan for financing higher education through 1980. In preparing their financial plan, the Regents have recognized the difficult financial problem which the

State Government and its taxpayers have faced in recent years. On the other hand, they are justifiably concerned about the financial obstacles confronting low- and middle-income students, which bar them from equal educational opportunity, and about the fiscal crises faced by a number of private and public institutions. The Regents support financial arrangements which will enable the post-secondary system of the State to accommodate all citizens who seek entry into it and services from it.

The Regents propose a level of State financial support to higher education which rises roughly in proportion to the expected increases in New York State revenues between now and 1980 (see table 7, page 140). Such a financing commitment by the State—together with expected revenues from Federal and outside sources, increases in faculty productivity, the establishment of a consistent tuition policy applicable both at the City and State Universities, and small increases in tuition related to price level at private institutions—will provide adequate revenues to permit realization of the specific objectives set forth by the Regents in their 1972 statewide plan for collegiate post-secondary education to 1980.

The specific objectives set forth by the Regents in this plan are based upon long-term goals which have been reviewed, discussed, and accepted by the education community, including collegiate post-secondary educational institutions and agencies, and citizens of the State. This unit examines financial arrangements needed to accomplish these objectives. In addition, it identifies weaknesses in the current financial structure, defines the level of expenditures required by institutions to meet their enrollment demands, and proposes a program of State and Federal support for financing these expenditure levels.

Financial Principles

Principles guiding the development of new financial arrangements essential to achieve the Regents goals are summarized below.

The State's responsibility for financing higher education should take into account the State's limited resources; requirements for added State support of health, mental health, prison reform, environmental conservation, and other public needs which have a legitimate claim on the State's budget; and the already heavy burden of State and local taxes on the residents of the State of New York. The Regents believe, therefore, that the State's support for collegiate post-

secondary education in 1980 should be roughly the same proportion of the State's revenues as it is today.

Institutions of collegiate post-secondary education have a responsibility to their students, faculty, alumni, and the public to continue to manage their affairs as effectively as they can in order to provide the highest quality education possible in a reasonably efficient manner. The Regents believe that institutions can achieve higher levels of productivity than they now enjoy and thus should provide in their financial plan for increased productivity between now and 1980.

The Regents recommendations for financing higher education draw heavily upon the assumption that the interests of the people of the State of New York are best served by maintaining and strengthening a comprehensive system of collegiate post-secondary education through maximum and efficient use of public and private higher education resources and through maintenance of the financial viability of private institutions. Therefore, they include proposals that would utilize more fully the available capacity of nonpublic institutions in the State.

The Regents believe that the State has a commitment to support high quality institutions in both the private and public sectors and they propose programs of support which will enable New York State to maintain its high national rank in providing quality academic programs.

The Regents believe that the public institutions of the State should establish a more rational tuition policy which considers the student's ability to pay in relationship to the level and cost of instruction he receives.

While recognizing that tuition charges among private and public institutions should be more nearly equalized, the Regents believe that the State should continue to support and subsidize instructional costs, and hence tuition levels, at public institutions, so that these institutions may continue to serve students from all income categories. Additionally, the Regents propose, through an increased scholar incentive program and increased general aid, that the net cost to undergraduate students attending private institutions be reduced toward the levels paid by undergraduate students attending public institutions.

The Regents recommend that both public and private institutions be held to high levels of public accountability concerning

the quality of their educational programs, their enrollment policies, their tuition policies, and the effectiveness of their management. Increased accountability, wherever possible, should be based upon systems of public disclosure rather than direct controls.

Weaknesses in the Current Financial System

It has been suggested that the financial problems of the State's higher education system could be solved by a massive increase of unrestricted funds, both State and Federal. Even if this were so, it is highly unlikely in view of the present economy and State and Federal policies. As one looks at the limited amount of new resources that may be available, it is appropriate to isolate basic structural weaknesses in the present financial system and to recommend ways of eliminating them.

The major weaknesses of the present system and examples of their results may be summarized as follows:

Insufficient Federal Support for Higher Education—Federal support of higher education has been trivial compared to State and local government support. For example, excluding sponsored research, Federal appropriations in 1969-70 supplied only 3 percent of the total educational and general revenues of the State's institutions, compared to State appropriations of 30 percent and local appropriations of 8 percent. Of the remaining 59 percent, tuition and fees supplied 32 percent, endowment income and gifts supplied 9 percent, and other sources 18 percent. The passage of the Federal Education Amendments Act of 1972 may provide increased aid.

Financial Barriers That Limit Student Access—Increased tuition rates at public and private institutions have lessened student options with the result that economic rather than academic considerations often dictate student choice for all but students from the highest income families.

At private institutions, higher tuition rates have erected barriers against middle- and low-income students who are unable to obtain tuition waivers. Tuition rates at private institutions have risen by an average of 7 percent annually during the last decade with the result that an undergraduate education at the average private residential institution now costs almost \$5,000 annually. Low- and middle-income students cannot meet this cost. Therefore, to attract adequate enrollments, private institutions in New York State now provide unfunded

student aid in excess of \$50 million annually, an amount exceeding the State's contribution for aid to students attending this kind of institution.

Likewise, the State University of New York has been limited in its ability to serve a low-income constituency because of its rising tuition rates and the location of many of its campuses in areas lacking public transportation. Still further increases in tuition at the State University of New York, especially at the 2-year college level, portend declining opportunities for low-income families and increased burdens for middle-income families.

The City University's no-tuition policy for matriculated undergraduates is one approach to meeting the needs of low-income students, but is an approach too costly for general application throughout the State.

The absence of a consistent public policy on tuition is inequitable to the taxpayer and to the student. Students of similar ability and economic circumstances bear different burdens for the cost of their education, depending upon county of residence and admissions policies of public institutions in the area of their residence. Private institutions are forced to subsidize thousands of low-income students while many middle-income and high-income students are subsidized by State and local taxes at public institutions. State policy should attempt to minimize such inequities while striving to maintain low cost undergraduate education for all State residents.

Accountability—It is essential that those with fiduciary responsibility at the State level be fully apprised of the course and magnitude of public fund expenditures. Institutional administrators cannot make effective and efficient decisions without accurate tools to monitor and appraise fund flows. Regardless of the personal or private goals of administrators, those public funds entrusted to them must be managed against the standard of "the public good" and attendant documentation must be presented for public scrutiny. While State support for higher education has increased dramatically during the last decade, the means of accounting for this support have shown little improvement.

Institutional Dependence on Local Tax Bases for Revenues—A major source of income for both The City University and the community colleges is local government. For example, in 1969-70, 37 percent of The City University's educational and general revenues, or over \$76 million, came from New York City. For the same time pe-

riod, almost \$62 million, or 40 percent of the community colleges' educational and general revenues, came from local sources. The open admissions program at The City University and the State University's commitment to provide open access through community colleges will result in an increased demand for educational services and, in turn, will result in increased demands for local revenues to finance these services. The variation in tax bases among sponsors and the present high level of property and sales taxes raise doubts that the necessary local revenue will be available even with tax increases, or that substantial increases in local support are desirable. Over-reliance on a local tax base and the limit on State funding of these institutions represent possible barriers to the extension of educational opportunity during the decade.

Decreased Philanthropic Support of Higher Education—Recent economic occurrences at the national and international levels, the possibility of adverse changes in the regulations governing donations, and movement toward the regulation of foundations are some of the factors responsible for a general lessening of private support of educational budgets and capital investments. The direct effect is primarily on the private sector where this type of income has been used to finance capital construction. The Regents believe that continued support from philanthropic sources can best be justified and utilized in subsidizing the operating costs of the system.

Educational Needs

The financial program presented herein is based upon the highest educational priorities and goals for post-secondary education. The tasks to be accomplished that have major financial implications may be summarized as follows:

- a. to broaden and equalize opportunity by increasing the accessibility of collegiate post-secondary educational institutions to low- and middle-income students. In quantitative terms, the achievement of this goal requires that the number of first-time freshman places be increased from 137,700 in 1971 to 181,500 by 1980.
- b. to provide adequate resources to enable the collegiate post-secondary institutions to meet their enrollment goals as approved by the Regents. Most of the additional student places needed to enlarge opportunities will be needed outside the City of New York, permitting upstate residents to

have the same educational opportunities now available to residents of the City of New York. The largest increase in enrollments will occur at community colleges outside New York City with full-time equivalent enrollments increasing to 148,700 in 1980, a 57 percent increase over 1972.

- c. to provide vertical mobility for 2-year college graduates aspiring to continue their education. As a result of the expected increase in community college enrollments, an increasing number of 2-year college graduates will be applying to 4-year institutions for admission to baccalaureate programs.
- d. to continue to extend collegiate post-secondary opportunities to educationally and economically disadvantaged students. These students will continue to be enrolled in special programs such as SEEK and HEOP which provide special services necessary for a successful college experience. It is projected that enrollments in these programs will grow from over 23,000 in 1972 to 45,000 by 1980.

Proposed Changes in Financial Arrangements

The Regents are proposing a financial program to meet the long-range needs of the collegiate post-secondary education system. The new arrangement proposed will promote full and efficient use of all the higher education resources of the public and private sectors. They cover expanded student aid, general aid for institutions, decreased reliance upon local tax revenues, and rational tuition policies for all sectors. The proposed program will increase State support in modest amounts and provide the basis from which maximum benefit may be derived from Federal aid programs. To this end the Regents propose the following changes in the present financial structure for collegiate post-secondary education.

Changes in Student Financial Aid Programs

1. Increased Scholar Incentive Payments for Students Attending Nonpublic Institutions

An increased schedule of scholar incentive payments should be established for students attending private institutions, thus providing a reduction in net tuition charges, especially for students from families in the lower income levels. The new schedule would increase the maximum payment from the present \$600 to \$900 in the first year,

to \$1,200 in the second year, and to \$1,500 in the third and succeeding years.¹¹³

Institutions enrolling scholar incentive recipients would be required to establish programs of matching student aid providing scholarships equal to one-third of the scholar incentive payment received for each student from a family with net taxable income of \$9,000 or less, and to limit tuition increases in any year to an amount tied to the rate of increase of costs per student at public institutions. Tuition increases would also be permitted to cover debt service on approved new construction programs. An independent board appointed by the Board of Regents would be established to monitor the program and to review and approve, where appropriate, exceptions to the tuition policy.

2. Modification of Scholar Incentive Requirement that Initial \$200 Tuition Be Payable by the Student

Under present legislation, students whose families have low incomes are, nevertheless, required to pay the first \$200 of tuition. In the case of students at the State University State-operated institutions, this limitation is overcome through the State University Scholarship Program, which will pay the difference between tuition and the Scholar Incentive Award. This program, however, does not extend to low-income students at other institutions. In the interest of equity, *the Regents recommend that the \$200 deductible requirement be eliminated for students with a family net taxable balance of \$2,000 or less, and that it be reduced from \$200 to \$100 for students with a net taxable balance between \$2,001 and \$6,000.* The primary effect of this change will be to provide much needed tuition relief to low-income students at community colleges.

3. A New "Transfer Incentive" Program for Graduates of 2-Year Colleges

The Regents recommend *establishment in 1973-74 of an experimental system of 3,000 scholar incentive transfer awards for New York State residents holding the associate degree from a New York State institution and seeking to enroll in baccalaureate programs offered by nonpublic institutions.* The awards would be in lieu of Regents scholarships or other regular scholar incentive aid. The maximum stipend would be \$2,000 in the first year of the program for students with family net taxable income of \$2,000 and less.¹¹⁴ The

¹¹³ See appendix A, table 30, page 298.

¹¹⁴ See appendix A, table 31, page 299.

awards would be available to New York State residents earning associate degrees at public 2-year colleges or at private junior colleges and would be limited to the 2 years normally needed to complete the higher degree. The maximum amount of funds available to any student would be limited to an amount that would not reduce net tuition payable below that payable at the State University. Because of the experimental nature of the program, the schedule of stipends would be reviewed annually.

The proposed program of transfer incentive awards for graduates of 2-year colleges aids both students and institutions, the former by broadening their opportunities for collegiate post-secondary education and the latter by providing higher cash tuition income and fuller use of resources. As a result, the private institutions in the State would be able to share responsibility with the public institutions for accommodating the increasing numbers of students who are being encouraged to seek access to post-secondary education through the community college system.

4. Increase in Number of Regents College Scholarships Awarded Annually

In 1945 the Regents, in "Scholarships to Meet the Needs of New York Youth for Higher Education,"¹¹⁵ *proposed that the number of Regents college scholarships awarded annually be 10 percent of the number of high school graduates. That objective has been reiterated and remains the present policy.* The last major adjustment was made in 1965, when the total number of Regents college scholarships awarded each year was increased to about 18,840. Since then, however, the number of high school graduates has increased to over 230,000. Accordingly, if scholarships are to be provided at the 10 percent rate, an increase in the number of scholarships awarded each year is called for.

5. Full Funding of the Student Aid Provisions of the Federal Education Amendments of 1972

The Regents hope and will press for full Federal funding of the student aid provisions of the Education Amendments of 1972. Little is known at this time of the financial impact of the basic educational opportunity grants upon students from specific income levels. The intent of the law clearly is to channel the bulk of the funds to the lowest income students. It would thus appear that the State's programs

¹¹⁵ "Scholarships to Meet the Needs of New York Youth for Higher Education," Albany, N.Y.: New York State Education Department, 1945.

of financial aid to students in a wider spectrum of income levels would have to be continued. Additionally, the Regents strongly urge funding of the portion of the amendments which would provide for Federal moneys to match increased State student aid programs.

6. Extending Scholar Incentive Awards to 5 Years of Baccalaureate Study

The Regents propose that payment of scholar incentive awards be extended to 5 years for students in opportunity programs who must take longer to earn a degree because of illness, poor academic preparation, reduced course load, transfer from a community college, or other reasons.

Since the HEOP and SEEK programs are predicated on reduced course loads and the consequent necessity for students to remain nine or ten semesters to complete what is usually considered an eight-semester curriculum, the present legislation must be amended to assure that all appropriate State resources can be used to enable these students to complete their educational programs.

General Aid for Public and Private Institutions

1. Funding of Enrollment Levels at Public Institutions Consistent with Goals Approved by the Regents

The Regents believe that State funding of public institutions should permit achievement of Regents approved enrollment goals while maintaining subsidized low-tuition rates. Continuation of subsidized tuition rates is essential to the extension of educational opportunity to lower income groups.

2. Increased Funding of the Bundy Program of Direct Financial Aid to Nonpublic Higher Education Institutions

The present financial program, established in 1968, provides about \$30 million annually in unrestricted aid to nonpublic institutions. The program was developed to provide institutional aid to help offset the necessity for tuition increases at nonpublic institutions resulting from rising costs and the pressures of inflation. The program has effectively reduced deficits at nonpublic institutions and, for many, the amounts available have provided the margin of funds necessary for their survival.

The formula for distribution of general aid has not been increased since the program's inception, despite costs which have risen by some 25 percent during the last 4 years.

The proposal calls for an increase in the funding of the pro-

gram by about 60 percent to \$48 million annually, with the largest part of the increase allocated on the basis of undergraduate degrees awarded. The present and proposed formulas for distribution of funds are shown in table 4.

Table 4. Present and Proposed Formulas for General Aid to Nonpublic Higher Education

| | Amount Per Degree Awarded | | Percent Increase |
|--------------------------------|---------------------------|----------|------------------|
| | Present | Proposed | |
| (1) | (2) | (3) | (4) |
| Associate Degrees ¹ | — | \$ 300 | — |
| Baccalaureate Degrees | \$ 400 | 800 | 100 |
| Master's Degrees | 400 | 600 | 50 |
| Doctoral Degrees | 2,400 | 3,000 | 25 |

¹ Limited to 2-year colleges only.

The increased funds available under the program are expected to enable institutions to maintain tuition rates at or close to their present levels for the next few years. Funding of the institutional aid provisions of the Federal Education Amendments Act would eliminate the need for another increase in State support from 1975-76 to 1980-81, while enabling the private institutions to further limit tuition increases.

Substitution of State Support for Increased Local Support of Higher Education

1. The City University of New York

To overcome the aforementioned weakness of institutional dependence on local tax bases, *the Regents propose that the State assume a greater portion of the support of The City University*. Specifically, the proposal is that the State's share of operating support be increased in 5 percent annual increments from the present 50 percent to 75 percent in 1977-78. This should insure the continuation of The City University's open admissions program by providing the university with adequate funds for continuation of the program. The Governor should initially be given power to appoint one-third of the members of the Board of Higher Education. As the percentage of

State support increases, the number of appointments by the Governor should correspondingly increase.

2. Community Colleges

The Regents propose that the State assume the additional financial burden that will result from the expansion of enrollments at community colleges. The level of local support of community colleges would remain at the 1972-73 level. This would provide for more equitable financing of expanded educational opportunity in different counties.

Tuition Policies

1. The State University of New York

The Regents recommend that State University maintain subsidized low tuition levels for undergraduate students. The tuition levels should be adjusted to take into account changes in price levels. For graduate and professional education, the Regents urge that the State University review its tuition policy to insure that students contribute a larger share of the cost of their education.

2. The City University of New York

The Regents propose that The City University establish tuition charges for undergraduate matriculated students at the same level as the State University, which would then establish a consistent statewide tuition policy for public higher education. With the establishment of tuition, students would receive State scholar incentive payments to help defray the cost. Tuition rates should subsequently be adjusted to reflect changes in the price level.

3. Private Colleges and Universities

The Regents urge that *the private institutions limit tuition increases for undergraduate students to increases in the price level and to cover increases in debt service on essential construction.* It is expected that net tuition to the student and student aid deficits will decrease due to increased scholar incentive payments and the Regents college scholarship program along with Federal funding of the basic and supplemental educational opportunity grant programs.

Financial Implications of the Regents Proposals for Higher Education

The Regents financial proposals for meeting the needs of higher education for the decade ahead call for increased support from both State and Federal Governments. Serious consideration has been given to the cost associated with achieving the objectives that have been

set forth. Table 5 shows the resources required, by program, for the years 1972-73 and 1980-81. The increase in resources will result from the following factors:

- a. increased enrollments resulting from the Regents objective of enlarged collegiate post-secondary opportunity ¹¹⁸
- b. an annual inflation rate of 3.5 percent
- c. increased efficiency throughout the higher education system, especially in 4-year institutions where increases in productivity of 1 percent annually are expected. The net result of this approach will be a reduction in the cost per student in terms of constant 1972 dollars
- d. significantly increased Federal funding of the Education Amendments will not come until 1975-76. When the full authorization is funded, we estimate that New York State's share of the institutional aid provisions will amount to \$90 million annually.

Over \$4.170 billion will be required in 1980-81 to educate the projected enrollment. This represents an increase of \$1.693 billion over the estimated 1972-73 level. Increased State support and tuition and fees will provide over three-quarters of the increase. The \$252 million increase in Federal funds results from expansion of existing programs and assumes full funding of the institutional aid provisions of the Federal Education Amendments Act of 1972. This estimate will be revised to include nonformula provisions as regulations for their allocation are developed.

The projected \$770.2 million increase consists of \$470.0 million due to increased enrollments and the assumed changes in price level, and \$300.2 million due to funding changes resulting in increased State support. (See table 6.)

The three major funding changes are

1. \$135 million increase in student aid programs primarily from increased scholar incentive payments to students attending private institutions and initiation of scholar incentive payments to The City University students upon establishment of tuition,

¹¹⁸ The Regents have approved full-time undergraduate goals for The City University and the State University through 1975, and they have approved for planning purposes full-time undergraduate enrollment goals through 1980. They have deferred action on full-time graduate enrollments pending study of the Report of the Commission on Doctoral Education. The financial projections discussed in this chapter are based upon the enrollment goals for undergraduate and graduate students proposed by the institutions and accepted for planning purposes.

Table 5. Resources Required for Higher Education 1972-73 and 1980-81

| State Supported Programs | Resources Required for Operations (In Millions of Dollars) | | | Increase by Source of Funds (In Millions of Dollars) | | | | |
|--|---|---------|----------|--|---------------|-------------|------------------|---------------|
| | 1972-73 | 1980-81 | Increase | State Gov't | Federal Gov't | Local Gov't | Tuition and Fees | Other Sources |
| | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Total Programs | 2,477.4 | 4,170.4 | 1,693.0 | 770.2 | 251.6 | -28 | 562.4 | 136.8 |
| State University ^{1,2} | 585.2 | 1,066.1 | 480.9 | 329.3 | 65.2 | — | 83.6 | 2.8 |
| Community Colleges ^{3,4} | 245.0 | 450.0 | 240.0 | 116.2 | 20.0 | — | 65.8 | 2.0 |
| City University ^{4,5} | 283.0 | 503.0 | 220.0 | 148.0 | 16.0 | -28 | 66.0 | 18.0 |
| Private Colleges and Universities ⁶ | 1,271.0 | 1,902.0 | 631.0 | 19.6 | 150.4 | — | 347.0 | 114.0 |
| Student Aid ⁷ | 85.9 | 237.9 | 152.0 | 152.0 | — | — | — | — |
| Other ⁸ | 6.3 | 11.4 | 5.1 | 5.1 | — | — | — | — |

¹ State-operated institutions.

² Education and general expenditures plus transfers to debt service. See table 32, page 300.

³ Includes New York City community colleges. See table 35, page 303.

⁴ Education and general expenditures.

⁵ See table 36, page 304.

⁶ See table 37, page 305.

⁷ See table 38, page 306.

⁸ Includes the New York Network, the Einstein-Schweitzer Chairs, and the administrative offices for higher and professional education.

NOTE: Detail may not add to totals due to rounding.

Table 6. State Support for Higher Education
(In Millions of Dollars)

| Program | State Support for Higher Education ¹ | | 1972-73 to 1980-81 Increase | Amount of 1980-81 Increase Due to | | Amount of 1980-81 Increase Due to Growth |
|-----------------------------------|---|---------|-----------------------------|-----------------------------------|-------|--|
| | 1972-73 | 1980-81 | | Funding Changes | | |
| (1) | (2) | (3) | (4) | (5) | (6) | |
| Total State Support | 786.7 | 1,556.9 | 770.2 | 300.2 | 470.0 | |
| State University | 433.3 | 762.6 | 329.3 | — | 329.3 | |
| Community Colleges | 89.3 | 205.5 | 116.2 | 57.0 | 59.2 | |
| City University | 117.0 | 265.0 | 148.0 | 88.3 | 59.7 | |
| Private Colleges and Universities | 54.9 | 74.5 | 19.6 | 19.4 | 0.2 | |
| Student Aid ² | 85.9 | 237.9 | 152.0 | 135.0 | 17.0 | |
| Other ³ | 6.3 | 11.4 | 5.1 | 0.5 | 4.6 | |

¹ See table 39, page 307.

² Includes scholar incentive, Regents scholarships, transfer incentive program, State University scholarships, and City University scholarships.

³ Includes State Education Department administrative offices for higher education, education TV network, and academic chairs.

2. \$88.3 million increase in State support of The City University, resulting from increasing the State's share of operating costs from 50 percent in 1972-73 to 75 percent in 1979-80, and
3. \$57.0 million increase in State support of community colleges resulting from having the State assume the increase in local support.

The Regents proposals call for a slight increase in the proportion of State revenues allocated in support of the operation of the collegiate post-secondary education system by 1980. The ratio of State appropriations to total revenues would rise from an average of 11.06 percent in the 1970-71 to 1972-73 period to 12.12 percent in 1980-81. Overall, it calls for an increase from \$781 million in 1972-73 to \$1,557 million in 1980-81. (See table 7.)

Table 7. State Support of Higher Education
as a Percent of New York State Revenues ¹

| (In Millions of Dollars) | | | |
|-------------------------------|-------------------------------|---|---|
| Year | New York State Revenues | State Appropriation for Higher Education | Appropriation as a Percent of Revenues |
| (1) | (2) | (3) | (4) |
| 1970-71 | 6,116 | 730.0 | 11.93 |
| 1971-72 | 6,812 | 773.1 | 11.35 |
| 1972-73 | 7,844 | 786.7 | 10.03 |
| 1970-71 to 1972-73 Average | — | — | 11.10 |
| 1980-81 | 12,850 | 1,556.9 | 12.12 |

¹ See table 40, page 308.

Table 6 gives a breakdown of projected State support by program component. The major increases in State support for each component are as follows:

1. The State University of New York

The increased amount of State support for the State University will result from increased enrollments and rising debt service to

cover facilities expansion to date. Costs are expected to be controlled through increased productivity resulting in an annual saving of nearly \$70 million by 1980. Increased tuition and fee income and Federal institutional aid will be required to cover debt service, which is expected to rise to over \$200 million annually by 1980-81.

2. Community Colleges

Increased enrollments and the increased proportion of the financial burden assumed by the State are responsible for the \$116.2 million increase in State support. Approximately \$59 million of this increase will be due to increased workload. The remaining 48 percent or \$57 million of the increase would be due to substitution of State support for increased local support.

3. The City University of New York

Costs are expected to be controlled through increased productivity resulting in an annual saving of nearly \$40 million by 1980. The increased State support is due to enrollment increases and increased funding burden being assumed by the State. Of the \$148 million increase in State support, \$59.7 million is due to increased enrollments and \$88.3 million is due to increasing the State's share of operating costs to 75 percent. Increased tuition income and Federal institutional aid will result in a \$45-\$50 million annual savings to the State.

4. Private Colleges and Universities

The increase in State support of private institutions results entirely from the proposed revision of the Bundy Aid Program (see table 8). The reduction in State-funded health professions education programs is expected to occur as Federal funding is increased. The funding of the institutional aid provisions of the Federal Education Amendments Act of 1972 will result in nearly \$35 million annually for the private institutions, thus, it is hoped, eliminating the need for any further increase in State support until after 1980.

Costs are expected to be controlled through increased productivity of about 6 percent over the balance of the decade resulting in an annual savings of over \$100 million by 1980-81.

5. Student Aid Programs

The largest portion of the increase in student aid programs will result from the increased scholar incentive program, proposed by the Regents (see table 9). The two major increases in the scholar incentive program will come from higher scholar incentive payments to students attending nonpublic institutions and payments to undergrad-

Table 8. Projected State Aid to Nonpublic Institutions for the Years 1972-73 and 1980-81

| (In Millions of Dollars) | | | | |
|--------------------------|----------------------------|---------------------------------------|------|-------------------------------------|
| | Bundy Program ¹ | Health Professions Education Programs | HEOP | Total Aid to Nonpublic Institutions |
| (1) | (2) | (3) | (4) | (5) |
| 1972-73 | 32.9 | 15.2 | 6.8 | 54.9 |
| 1980-81 | 51.5 | 7.0 | 16.0 | 74.5 |

¹ Includes \$2.7 million appropriation for Polytechnic Institute of Brooklyn in 1972-73.

NOTE: See table 37, p. 305, for detailed footnotes.

uate matriculants at The City University when tuition rates are established. Funding of the Federal Education Amendments Act of 1972 by 1976 will reduce student aid for low- and middle-income students, obviating further increases in scholar incentive awards beyond 1976.

Table 9. Projected State Support of Student Aid Programs for the Years 1972-73 and 1980-81 ¹

| (In Millions of Dollars) | | | |
|------------------------------------|---------|---------|------------------|
| | 1972-73 | 1980-81 | Percent Increase |
| (1) | (2) | (3) | (4) |
| Scholar Incentive ² | 53.0 | 185.6 | 250 |
| Regents Scholarships & Fellowships | 32.9 | 43.6 | 33 |
| Transfer Incentive Program | — | 8.5 | — |
| Total Student Aid Programs | 85.9 | 237.9 | 177 |

¹ See table 38, p. 306, for detailed footnotes.

² Includes State University scholarships.

6. Other

The increased State support in this area results from price level increases, full funding of the Einstein-Schweitzer Chairs, continued development of the Educational TV Network, and projected activities of the State Education Department administrative offices.

Conclusion

The Regents believe that the program presented herein represents a feasible financial plan to meet the higher education needs in the years to come. It represents a level of concern and public commitment that the residents of New York State have a right to expect from their system of higher education. We urge a careful review of this program by the Governor, members of the Legislature, the higher education community, and the public as we plan together for the development of a comprehensive higher education system of high quality in the decade ahead.

Section 3: To Regionalize for Maximum Efficiency

Unit 1: The Concept and Implications

New York's public and private colleges and universities are under pressure to provide increasingly varied opportunities for post-secondary education to a greater number of students at a time when costs are rising at a much higher rate than either government or private financial aid.

Three possible solutions exist: (1) permit a relative decline in educational opportunity available for a growing and increasingly diverse service population; (2) transfer a greater share of the burden to public institutions on the basis of full public support; or (3) find ways to use all resources, public and private, in an integrated fashion. Regionalism represents an effort to achieve the third alternative.

This section describes (1) the background of regional relationships, (2) the emerging concept of regionalism in the State, (3) steps for the development of regionalism, (4) objectives and principles, (5) problems to be overcome, (6) guidelines for regionalism, and (7) a summary of activities in three experimental regions—New York City, the Northeast, and Genesee Valley.

Background of Regional Relationships

Interinstitutional cooperation has a long history in New York.

Although many of the resulting relationships have been modest in scope involving informal and voluntary associations concerning specific activities of secondary importance, they have helped to create a favorable climate for regional arrangements.

A group of institutions in New York City received a Regents charter as the Council for Higher Education in New York City in 1958. A second consortium, the College Center of the Finger Lakes, was organized in 1961. More recently, with Regents encouragement, consortia have been developed in Rochester, Buffalo, the Mid-Hudson Valley, Brooklyn, the Capital District, Nassau County, and the St. Lawrence Valley. These consortia, many of which employ full-time directors, show promise of sponsoring regional planning and operating programs that will assist the development of the regionalism concept presented here.

The 1969 Legislature showed interest in fostering regional relationships among other higher education institutions by amending the State Education Law to permit the creation of Regional College Co-operative Service Boards. During the 1971 legislative session, the chairman of the Joint Legislative Committee on Higher Education introduced legislation which would have established regional councils for higher education planning. The legislation, while not reported out of committee, was a focus for study and discussion. The 1972 Legislature amended that section of the State Education Law pertaining to the powers of the trustees of the State University of New York to include, "The promotion of and participation in . . ." interinstitutional arrangements for cooperative resource usage on a regional basis, thus expanding the role of the State University trustees to include regional activity. Similar powers were added to those given to the trustees of community colleges by the Education Law.

During the 1971-72 year, the Regents, and State Education Department staff members as their agents, worked with institutional representatives to promote a wide range of developmental regional activities. Forums for policy level discussion of regionalism were provided at the Regents annual Trustees Conference in February and at meetings sponsored by both public and private institutions across the State.

The Emerging Concept of Regionalism

The concept of regionalism which has emerged proposes that the State Education Department, in conjunction with the public and

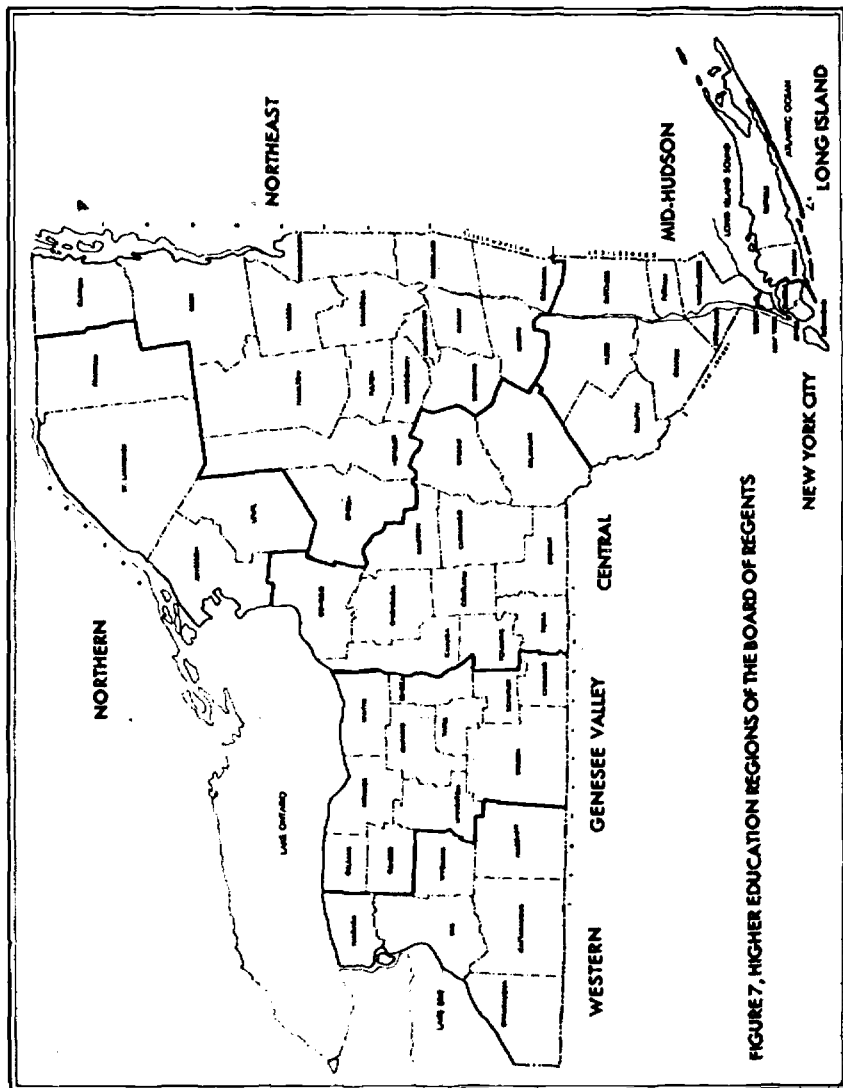


FIGURE 7. HIGHER EDUCATION REGIONS OF THE BOARD OF REGENTS

private sectors, seek to develop programs to utilize all resources of public and private institutions of higher education on a regional basis, where feasible, to meet individual and societal needs within the State. The process is characterized by a variety of activities aimed at using all institutions in the planning, coordination, and operation of activities directed toward strengthening educational programs; broadening opportunity; and achieving fiscal efficiency at all post-secondary levels.

Commitment by higher education institutions to the concept of regionalism was emphasized by resolutions passed by the Executive Committee of the Association of Colleges and Universities of the State of New York (ACUSNY) and approved in principle by the full membership in September 1971.¹¹⁷ It was resolved by ACUSNY that all public and private higher education resources of the State be considered as a single resource committed to the goal of meeting the higher education needs of the State, with emphasis placed on both regional planning and regional operational activities.

In October 1971, the Regents approved in principle the development of a plan for regional relationships among institutions of higher learning. Thereafter, at their January 1972 meeting, the Regents incorporated in a position paper on the financing of higher education a section on regional relationships expressing long-term goals and general policy.¹¹⁸

The map in figure 7 defines eight regions drawn up by the State Education Department in consultation with the higher education community. In developing the boundaries of these regions, care has been taken to build upon the 13 regions generated by the Office of Planning Services as mandated by Governor Rockefeller in Executive Order No. 44, February 1, 1971, providing for comprehensive planning and development regions for New York State. In drawing the regional boundaries, the State Education Department staff sought to incorporate into each region the following characteristics: enrollments which would form efficient educational groupings, a range of institutions offering full program coverage from 2-year institutions through universities, and the availability of doctoral programs in several fields.

¹¹⁷ See appendix E, p. 315.

¹¹⁸ "Financing Higher Education Needs in the Decade Ahead, A Statement of Policy and Proposed Action By the Regents of The University of the State of New York," Albany, N.Y.: New York State Education Department, January 1972, pp. 24-25.

In each of the eight regions, there exists one or more operating consortia. The Regents will continue to encourage existing consortia to serve as nuclei for regional planning and organization. The map in figure 8 illustrates such centers of possible growth.

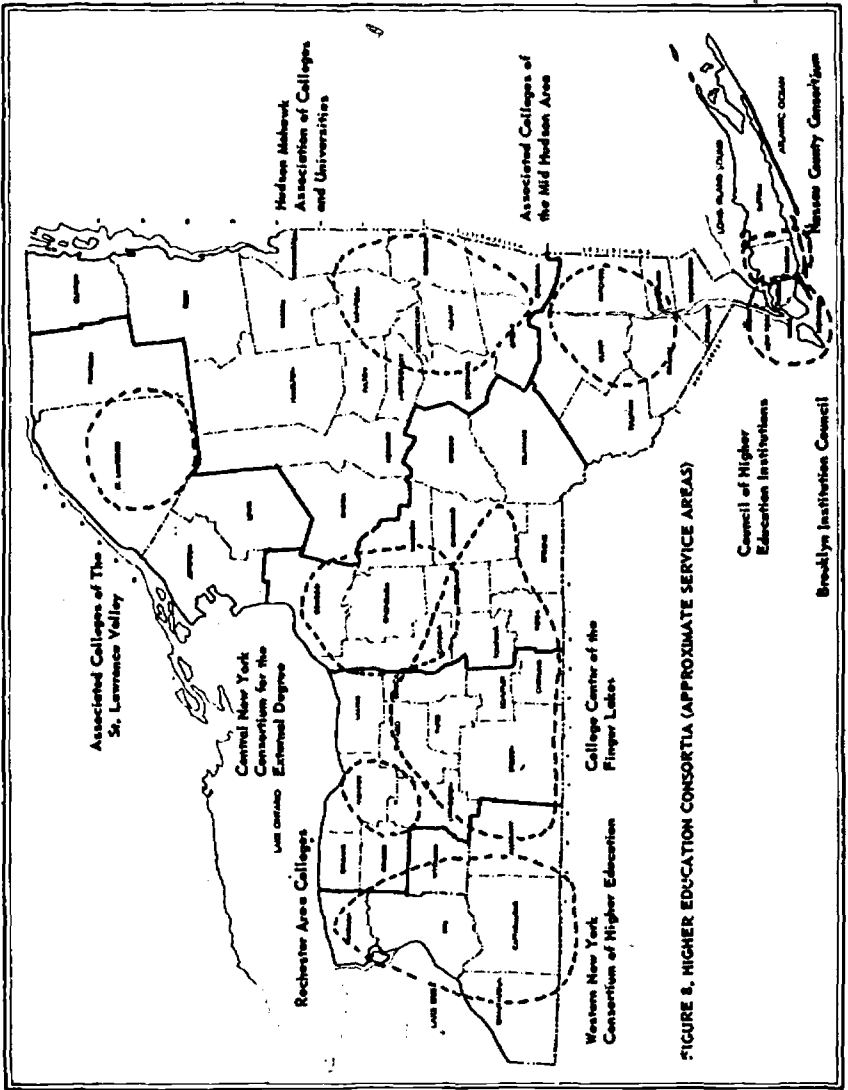
It is likely that in doctoral education and in certain professional fields the designated region will not be relevant. The number and character of medical schools in the State, for example, may make it appropriate to consider the entire State as the region; the same is true for engineering schools and certain other graduate and professional areas.

Steps for the Development of Regionalism

The period from 1972 to 1974 will serve as a time for pilot program development involving testing and evaluation in a selected number of regions. It is anticipated that the emphasis and techniques used will vary with local initiative and resources. During the pilot period, experiments based on problems and activities related to a particular region are expected to develop patterns for planning, coordination, and operation. These experiments will help identify means that may be appropriate in providing for the eventual exercise of responsibility on a continuing basis at the regional level. During the pilot phase, emphasis will be on broad participation of the institutions in shaping the nature of regional activities. The resulting range of models should provide a base for the establishment of operational programs during the phase of general application of regionalism to be started after 1974.

The first step in the pilot regional process is a formal request to the Regents from a majority of institutions in that region for designation as a pilot region and for the appointment of a Regents advisory council.¹¹⁰ Councils consist of chief executive officers of participating institutions and representatives of the general public. A council is charged with assessing local needs, inventorying resources, providing measures for exchange and evaluation of institutional plans, identifying areas of potential development for task force study, and exploring the structures and policies appropriate for regional activity. The council's objective is to present to the Regents, in 1 to 2 years, a plan for regional relationships reflecting participation of all interested institutions in the area. Plans are expected to

¹¹⁰ An institution may, by petitioning the Regents on an individual case basis, be authorized to affiliate with an adjacent region.



include reference to joint planning, coordination, and selected operating activities.

During the pilot period, each regional advisory council will be charged by the Regents to explore and comment upon the practicality of a permanent regional body performing these functions, debating whether it should be a committee, council, or board; what relationships it should have to existing policy bodies both public and private; and what authority might be required to exercise the responsibility it would accept.

Objectives and Principles

Regional plans will have meaning only if they lead to significant activities and specific results. Some anticipated characteristics of the process of regional development follow:

Planning

1. Comprehensive regional planning might involve the following activities and results:
 - a. Activities
 - (1) assessment of regional needs
 - (2) inventory of the region's resources in terms of facilities, faculty, educational programs, and unused capacity
 - (3) determination of the appropriate roles and levels of participation by private and public institutions in meeting the total needs of the region
 - (4) exchange of institutional plans
 - (5) reports of task forces and development of proposals for regional relationships among institutions or groups of institutions.
 - b. Results
 - (1) integrated use of public and private institutions as a single resource for meeting the post-secondary education needs of the region
 - (2) use of such noncollegiate resources as industrial training programs, public libraries, hospitals, museums, and cultural organizations in meeting regional post-secondary education needs
 - (3) providing all high school graduates, or the equivalent, programs of the highest possible quality appropriate to the needs of the region.
2. Establishment of mechanisms to consider and develop rec-

ommendations for new programs, facilities, and institutional relationships.

3. Review of the surplus facilities of the private sector of the region and design of financial arrangements for their use in meeting the commitments of the public sector to open admissions and full opportunity.

Coordination

Program Offerings

1. development of a cross-registration system among institutions to expand the range of curricular alternatives
2. coordination of both internal and external degree programs among institutions through interinstitutional acceptance of academic credits
3. attainment of an agreement among institutions in regard to areas of academic program specialization with appropriate consideration of regional needs, the relative strengths of the institutions, and the views of various interest groups of the region
4. consolidation of master's and doctoral programs in fields of limited demand to reduce operating deficits and to improve quality of instruction
5. consolidation of certain specialized first-professional programs for efficiency and quality along with, in some cases, program restructuring and geographical relocation.

Operations

Facilities

1. utilization of special resources such as dormitories, physical education space, health services, and libraries
2. design or adaptation of expensive technological systems (e.g., computers, document transmission facilities, and television facilities) for multiinstitutional use.

Program-Related

1. joint sponsorship of courses, programs, and degrees
2. application of available technology to the problems of transportation of students, transmission of materials, recordkeeping, and remote transmission of instruction
3. joint responsibility for community needs through educational service programs.

Problems To Be Overcome

Funding—The major difficulty will be in finding staff and money to make it possible for each advisory council, and for the State Education Department on behalf of the Regents, to collect the data, assess the possibilities, arrange the negotiations, and provide the services and day-to-day support necessary to develop and en-

courage practical programs of planning and operation. To meet this funding problem, the Regents are submitting a 1973-74 budget request for \$500,000 to support the development of regional relationships. Of this sum, \$450,000 would be apportioned in relation to the full-time enrollment in a region, with a minimal grant of \$100,000. It is expected that grants would be made on application to participating regions. The remaining \$50,000 would be set aside for support staff in the Education Department.

Cooperation among both public and private institutions may require modifications in existing legislation and educational policies. One example exists with regard to approval for public institutions to pay membership fees to a chartered consortium which provides benefits for students in both private and public institutions. State institutions have been prohibited from taking part in joint contracting with private schools. Also complex is the problem posed by the so-called Blaine Amendment to the State Constitution (article XI, section 3) which prohibits using public funds in connection with religiously affiliated institutions. This has implications whenever a religiously affiliated institution is a member of a regional agency which includes both public and private institutions. These problems have at least been partially overcome by the passage of legislation in 1972 authorizing fiscal participation of public institutions in cooperative activities. Further clarification of the adequacy of the new law will be required in the light of experience.

Calendar Coordination—If an active sharing of educational resources is to be developed (for example, in joint programs or cross-registration of students from one campus to another), a matter as simple as varying academic calendars will present a problem. If there are rigid patterns of class attendance, the problem could cause difficulty. But if students are advised of calendar variations and are held responsible for attendance, mastery of instructional material, and participation in examinations, the resulting flexibility will allow wide cross-enrollment participation without the sometimes sensitive negotiation of a uniform calendar.

Regional Boundaries—Although regional boundaries have already been adopted (as proposed in the Governor's Executive Order of February 1971), it must be recognized that these boundaries will not apply rigidly to every academic level. Examples are the health, hospital planning, elementary/secondary education, and library fields.

Tradition—Universities and colleges are among the most stable of human organizations, and, while this stability represents strength during times of social and political crisis, it also serves as a barrier to innovation and change. This tradition has in recent years been compounded by a growing rigidity in matters such as faculty tenure, workload, conditions of employment, and legal recourse, all of which will affect any interinstitutional arrangements.

Autonomy—One of the most difficult problems will be to devise organizations that will allow for the collective role of individual institutions (both public and private and varying in size and objectives) in planning, coordination, and joint operation. Such an organization must harmonize with the long-range goals and objectives of the boards of trustees of individual private colleges, the boards of trustees of the public university systems, and the Regents.

Guidelines for Regionalism

The following regional development guidelines have been generated by the State Education Department in cooperation with the various sectors of the higher education community:

1. Regional advisory councils will continue to be established at the initiative of the institutions in the individual regions.
2. Regional advisory councils will be responsible for the selection of their own staffs and for the definition of their agenda in terms of needs identified with the regions.
3. The State Education Department will seek the advice and counsel of regional councils with respect to planning decisions that are the responsibility of the Regents with advice of the Department.
4. The regional council's primary responsibility is for coordinated planning, with the specific pattern for regional operations to be determined on a case-by-case basis and to be consistent with its objectives.

The Regents believe that continued efforts at regional development by the various sectors of higher education in the State should follow these guidelines.

Unit 2: New York City: A Pilot Project

In September 1971, the Regents of The University of the State of New York designated the five boroughs of the City of New York as a pilot planning region for higher education and created the first regional advisory council, an 18-member board which included seven

chief executives of public institutions, nine presidents of private institutions, and two public-at-large representatives. The council was charged with the development of a report to be submitted to the Board of Regents in June 1972. The council accepted as its task a survey of the human, program, fiscal, and physical resources of higher education institutions in New York City. It also proposed to list specific regional problems (especially in the area of admissions, counseling and guidance, data collection, facilities, finances, programs, and research). The council also planned to recommend mechanisms and structures which would lead to a greater sharing of institutional resources in the metropolitan region.

In November 1971, the Regents Advisory Council (New York City) appointed five task forces: The Full Utilization of Resources, Libraries and Major Facilities, Professional Programs, Graduate Programs, and Cooperative Programs for the Disadvantaged. These task forces met frequently from December 1971 to March 1972 to prepare their reports for the council. The council's report¹²⁰ was submitted in June 1972 in compliance with their charge, and was commented upon favorably in July 1972 by the Regents.

The following Regents comments will be used for the future development of the project.

The Regents approved the council's major recommendation which calls for the creation of a permanent regional coordinating council for post-secondary education in New York City, which would assume responsibility for coordinating future regional planning for cooperative activities in the New York City post-secondary community and for representing and reporting the needs of this community to the Regents and other agencies.

A second major proposal of the council approved by the Regents would establish a permanent coordinated admissions program for New York City to facilitate the most efficient use of institutional resources commensurate with student desires and needs. Such a program is essential, the Regents state, if further deterioration of private institutions' enrollment is to be prevented and if extensive overcrowding in The City University is not to be further aggravated. The coordinated admissions program office would also provide counseling and guidance services as well as general information about program offerings throughout the region.

¹²⁰ "A Regional Plan for Higher Education: A Report from New York City," New York: New York City Regents Advisory Council, June 9 1972.

A related recommendation of the council for the transfer of some low-income students from the senior colleges of The City University to cooperating private institutions which are not fully utilizing their facilities is still being reviewed by the Regents.

A third major recommendation approved by the Regents would create a center for lifelong learning programs which would, among other things, inventory existing post-secondary collegiate and noncollegiate nondegree programs and courses. The Regents believe that the development of such a center would provide a clearinghouse for information about educational programs for lifelong learning, and would serve as a guidance, counseling, and referral center as well as a catalyst for the development of cooperative programs to meet regional needs.

Other recommendations of the council approved by the Regents include

1. strengthening of inservice and professional training programs for counselors, and development of cooperative relationships for counseling between the colleges and universities and the New York City Board of Education
2. development of a central data bank under the council
3. establishment of a space-available inventory to help achieve maximum utilization of all facilities as one function of the data bank
4. encouragement of continuing education programs for library personnel
5. development of appropriate arrangements for cooperative academic programs to eliminate duplication and provide enrichment.

The Regents approve in principle, but at the same time request the advisory council to develop further, the following recommendations:

1. that interinstitutional arrangements to provide minimum library (collection) and performance standards be developed in line with the recommendations of the Commissioner's Advisory Committee on Long-Range Planning for Academic Libraries
2. that development of a method for financing a system of subregional or intermediate libraries to complement basic undergraduate collections be encouraged
3. that, in order for concrete activities to be undertaken by a research clearinghouse and to guide further development of cooperative research, certain specific projects be identified.

The Regents requested the council to study further and offer appropriate proposals related to the following recommendations:

1. that planning be initiated for the support of central facilities for laboratory and research equipment and other limited resources
2. that further attention be given to practical means of providing access, for graduate students and faculty, to major library research collections on a full cost-recovery basis
3. that careful study of more intensive use of the special and expensive facilities necessary for television broadcasting and for computers be undertaken.

The Regents approved the recommendation that individual institutions, working with the advisory council, continue to develop the following proposals:

1. that policies be modified to permit expanded opportunities for cross-registration
2. that new educational patterns which provide expanded opportunities for social and economic mobility be explored, including undergraduate "mini-career" work-study programs, lifelong training and retraining programs of various durations and levels, and post-secondary independent study programs
3. that subregional consortia, to include public and private colleges and universities in geographical proximity, as well as high schools and other appropriate educational programs and agencies, be developed.

The Regents will include in their legislative or budgetary program for fiscal year 1973-74 the following recommendations:

1. that adequate funding for the support of Regional Coordinating Council activities be provided through State sources, and that such a council be free to seek funds from other public and private sources
2. that the current freeze on construction for the public higher education institutions be removed, and that the goal of 100 net assignable square feet per full-time equivalent student be supported for these institutions. The Regents note that the recent action of Governor Rockefeller in approving a priority list for construction in the amount of \$520 million for City University senior colleges will permit progress toward this goal. The Regents further will support continuing attention to the construction program to promote additional progress.

The Regents have under consideration for inclusion in their leg-

islative and budgetary program for the fiscal year 1973-74 the following proposals:

1. that the scholar incentive program be adjusted to cover part-time students and to allow for the economic reality of geographical situation
2. that per capita aid to private schools of engineering be provided on condition that long-range plans for financial stability be developed during 1973-74
3. that institutional tuition differentials for students requiring remedial services during the first 2 post-secondary years be provided.

Unit 3: Other Pilot Regions

The Northeastern Region

As a result of interest shown by several colleges and universities of the Northeastern Region and on the part of the Hudson-Mohawk Association of Colleges and Universities, a poll was taken late in 1971 of all institutions of the Northeast to determine their degree of interest in, and willingness to participate in, a formally recognized pilot region. Polling was done by the State University for the public institutions and by the State Education Department for the private institutions. Results overwhelmingly favored pilot region status, although a small number of colleges elected not to participate, as was and is their prerogative.

An Advisory Council for the Northeastern Region, consisting of the presidents of 27 of the institutions and nine distinguished laymen, was appointed by the Regents in January 1972.¹²¹

At the first meeting of the Regents advisory council in March 1972, four areas were identified for task force investigation and possible regional planning and operational activities:

1. *Cross-Registration and Program Offerings*
The purpose of the task force will be to identify the range of programs offered by the institutions of the region, to assess possibilities for consolidation and for joint offerings, and to encourage and enlarge existing practices of cross-registration.
2. *Computers and Their Future*
An assessment will be made of the region's existing or

¹²¹ President Harold Martin of Union College was elected by this body to serve as its president. Robert Briber, the executive director of the Hudson-Mohawk Association of Colleges and Universities, agreed to cooperate with the Regents and with the council to provide some of the necessary leadership, administration, and services in the interest of this pilot region.

planned computer facilities to determine if they can be utilized more effectively and if economies can be achieved.

3. *Television and Other Media*

The task force will assess the need for and the use of television and related media on a regional basis to determine if existing or planned facilities can be used to enrich educational programs between and among post-secondary educational institutions and with area industry.

4. *Community College Articulation*

Transfer opportunities for 2-year college graduates are a major concern of the State University system, a concern that is also of strong interest to the private institutions. It was agreed that joint consideration of the problem be undertaken.

A steering committee of the advisory council was appointed. Through it the chairmen and membership of the four task forces were selected. This work has proceeded during 1972 with reports to the advisory council scheduled for early 1973. The advisory council anticipates submitting a full report on the possibilities and problems of regional relationships in the Northeast to the Regents in June 1973.

The Genesee Valley Region

A process similar to the one described in the Northeastern Region took place in the Genesee Valley. Here the initiative was taken by public and private institutions and by the existing consortium, Rochester Area Colleges. A representative advisory council elected a president,¹²² and at its first meeting in April 1972, five areas for task force consideration were discussed:

1. *Educational Services to the Community*

The public at large, particularly members of the minority community, has educational needs which the collective post-secondary resources of the area could help meet.

2. *Inventory of Present Coöperative Arrangements*

The area has many varied cooperative arrangements and there would be value in identifying them as a basis for improvement, linkage, and strengthening.

3. *The Potential for College Enrollment in the Area Colleges*

A consideration of the potential for college enrollment in terms of the size of the population, the areas from which drawn, and the assumptions upon which institutions plan for their enrollment objectives may be an area of fruitful exploration and discussion.

¹²² Paul Miller, president, Rochester Institute of Technology.

4. *Resource Utilization*

Specialized, expensive resources such as computers may represent an area where money can be saved if institutions can be brought into a network relationship.

5. *Planning Information and Program Duplication*

The possibility of exchanging institutional plans to assess program relationships may make it possible to develop a comprehensive approach to educational needs.

The Genesee Valley Regional Advisory Council's formal report to the Regents is scheduled for early 1973.

Part IV: Noncollegiate Post-Secondary Education

Section 1: The Nature of Noncollegiate Post-Secondary Education

Education beyond high school encompasses far more than colleges and universities. A significant component of post-secondary education exists outside of collegiate institutions. Although comparatively unheralded in the realm of post-secondary education, noncollegiate forms of education beyond high school provide an enormous variety of opportunities. As collegiate types of institutions have grown more similar, noncollegiate programs of education beyond high school have continued to diversify. Furthermore, it has been estimated that, nationwide, eight times as many students are enrolled in noncollegiate programs as in collegiate programs.¹²³

This section of the plan focuses upon that vital area of post-secondary education in New York State identified as noncollegiate. Typically, noncollegiate programs lead to work and often to certificates rather than to degrees or additional courses; they less frequently require academic credentials for admission. Noncollegiate post-secondary education comprises several types of proprietary schools, including private trade and business schools as well as correspondence and computer schools, occupational and other continuing education programs for adults, Federal and State manpower training programs, and apprenticeship and industrial training programs. The magnitude and variety of this area of post-secondary education are evidenced in its vast array of programs—public and private, formal and informal, traditional and innovative, short-term and long-term.

The expansion of noncollegiate post-secondary education has been spurred by the commitment to extend equal educational opportunity beyond high school. As this commitment is pursued, post-sec-

¹²³ Lyman A. Glenny and George B. Weathersby, "Statewide Planning for Post-Secondary Education: Issues and Design," Boulder, Colo.: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, September 1971.

ondary education becomes available to individuals who may perceive the traditional college education as inapplicable, irrelevant, unrealistic, or undesired. Adequate program development is considered mandatory to meet the diverse educational needs and to provide ever-widening educational opportunities for new and different types of students.¹²⁴

During the past decade, the expansion of noncollegiate post-secondary education also reflects increasing recognition of two fundamental goals: economic well-being and lifelong educational opportunity for every individual. The degree of priority assigned to these goals during the 1960's largely resulted from pressures to initiate or accelerate progress for those in our society who have typically not enjoyed full economic and educational opportunity. Other related forces also created a concern to develop noncollegiate forms of education beyond high school. Most important was the need for new approaches in education and training (1) to enable individuals to develop, augment, and adapt their knowledge and skills in light of continuous and profound changes in the nature of work and (2) to meet society's increasing demand for more extensively educated and trained workers.

Another perspective from which to appreciate the role of non-collegiate post-secondary education is the opportunity it presents for each individual to increase his options. A limited choice of opportunities does little to free individuals for the realization and pursuit of their interests. Disenchantment with traditional forms of academia is readily observable, even among college students. If attractive options to collegiate post-secondary education were provided, fewer high school graduates would enter college because they lack a better alternative.¹²⁵

Continuing Education

The scope of noncollegiate post-secondary education is interlaced with elements of continuing education. In general, continuing education encompasses those activities that are based on the idea that the process of education is continuous for all persons—that

¹²⁴ Ernest G. Palola, Timothy Lehmann, William R. Blischke, "Higher Education by Design: The Sociology of Planning," Berkeley: Center for Research and Development in Higher Education, 1970.

¹²⁵ "Report on Higher Education: Report of Task Force (Frank Newman, chairman) to the U.S. Department of Health, Education and Welfare (Office of Education)." Washington, D.C.: U.S. Government Printing Office, March 1971.

learning does not stop with the conclusion of full-time school; with the receipt of diplomas, certificates, and degrees; or with the beginning of employment. In the context of noncollegiate post-secondary education, continuing education may be regarded as those learning activities by which adults acquire the knowledge, understanding, attitudes, and skills needed to improve their participation in a changing society.¹²⁶ More specifically, it usually achieves some particular end, whether occupational or personal, such as learning a new skill, gaining knowledge, or understanding and coping with new demands. It may be pursued by utilizing the resources of a formally organized, institutional program or by taking advantage of a variety of opportunities, however occasional or piecemeal. Thus, the spectrum of continuing education permeates all types and levels of educational experience, including noncollegiate post-secondary education.

It should be evident that there is no easy, concrete categorization of noncollegiate post-secondary education. Noncollegiate post-secondary education is a relatively unsystematic collage of programs defying traditional structural arrangements.¹²⁷ But the diversity in noncollegiate post-secondary education may be its greatest strength; this strength makes it highly significant and appropriate for inclusion in the 1972 statewide plan. Recognition of its critical importance in light of the trends and goals of post-secondary education and awareness of its resources and opportunities in contrast to those of the collegiate sector will benefit all education beyond high school, both collegiate and noncollegiate.

Section 2: Current Status

Although the range of noncollegiate education beyond high school is very broad and differs in nature from collegiate education, specific areas may be arranged according to purpose. Two very basic purposes are viewed as reasons for individuals to continue their education. Ewald B. Nyquist, Commissioner of Education, has articulated these in several public addresses, suggesting that education

¹²⁶ "Continuing Education: A Statement of Policy and Recommendations by the Regents of The University of the State of New York," Albany, N.Y.: The State Education Department, May 1969.

¹²⁷ Lyman A. Glenny and George B. Weathersby, "Statewide Planning for Post-Secondary Education: Issues and Design," Boulder, Colo.: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, September 1971.

should help people to make a living and, also, to make a life. The current programs of noncollegiate post-secondary education are discussed under categories reflecting these two important and related purposes.

Unit 1: Education for Making a Living

All forms of post-secondary education bear at least potentially upon occupational or career development. Noncollegiate education beyond high school offers a wide variety of opportunities for occupational education in its broadest sense. In the past decade, a whole new sphere of training programs has been created and the more traditional programs of work-related education and training have been expanded. This has resulted in a variety of mechanisms for delivering occupational programs and services to adults and young people who have completed or left high school. This unit presents an inventory of the general kinds of noncollegiate occupational programs that are currently available.

Occupational Programs Within the Public Educational System

The traditional core of post-secondary noncollegiate occupational education in New York State has consisted of adult programs financed, administered, and operated as part of the established public educational system. These include the adult programs conducted by the public schools and Boards of Cooperative Educational Services (BOCES) and the nondegree programs conducted by 2-year public colleges and, more recently, by the urban centers. In the 1970-71 academic year, all of these programs combined served slightly more than 100,000 persons.

Vocational-technical education for adults has a long history of governmental assistance. A combination of Federal, State, and local aid has provided impetus for the growth of adult programs. The current legislation—the 1968 Vocational Education Amendments (VEA)—includes provisions to serve persons “who have completed or discontinued their formal education and are preparing to enter the labor market” and “those who have already entered the labor market but need to upgrade their skills or learn new ones.” In fiscal year 1971, almost \$4,664,000 of Federal VEA funds were allocated to adult occupational programs in New York State public schools, BOCES, and 2-year colleges. This allocation rose to nearly \$8,037,000 for fiscal 1972, in accordance with priorities identified in the Regents position paper on occupational education.

Although the Federal contribution to occupational education has been important, it represents only a small portion of the total expenditure for occupational education in New York State's public schools and colleges. The major burden of financing adult occupational education has fallen on State and local tax efforts and on individual students who must often pay tuition to obtain needed training or retraining. Most individuals will have recurring needs for education and training throughout their lifetime to cope with rapid and constant change, particularly in the occupational world. The public must develop and support adequate means of financing and administering an educational system that meets the needs of individuals regardless of age or previous background.¹²⁸

Despite limited finances, the public schools and the Boards of Cooperative Educational Services served 82,352 students in adult occupational education programs during the 1970-71 school year. Of this total, 35,130, or 43 percent, were enrolled in programs in the six major cities;¹²⁹ 18,540, or 22 percent, in the BOCES area occupational education centers; and the remaining 28,682, or 35 percent, in local public school facilities outside the six major cities. More than half of the local school adult enrollments outside the six major cities were in office education programs. The BOCES offered relatively few office programs, concentrating instead on the trade and industrial areas. In the six major cities, 73 percent of the enrollments were in trade and industrial programs and 16 percent were in office education. The 1970-71 distribution of 82,352 adult enrollments in public schools and BOCES across the seven major program areas of occupational education were as follows: agriculture, 1,506; distributive, 1,532; health, 4,016; home economics, 1,068; office, 23,798; technical, 4,070; trade and industrial, 46,362.

In addition to adults enrolled in occupational education in the public schools and BOCES, nearly 25,000 persons were served during 1970-71 in nondegree programs conducted by the 2-year public colleges and the urban centers. The nondegree programs range from 4 months to slightly less than 2 years and usually culminate in a certificate or diploma. They prepare students for work in such diverse fields as supermarket operations, department store sales, institutional

¹²⁸ "Occupational Education: A Statement of Policy and Proposed Action by the Regents of The University of the State of New York," Albany, N.Y.: The University, May 1971.

¹²⁹ Albany, Buffalo, New York City, Rochester, Syracuse, Yonkers.

housekeeping, building services, machine tool operation, data processing, and medical assisting occupations. In 1970-71, 14,351 persons were enrolled in nondegree occupational programs at the 2-year colleges. Of this total 2,639 were full-time and 11,712 were part-time. Approximately 10,000 persons were enrolled in occupational programs at urban centers—learning facilities administered by 2-year colleges at locations easily accessible to inner-city residents. During 1970-71, six 2-year colleges—New York City Community College, Borough of Manhattan Community College, Erie Community College, Hudson Valley Community College, Monroe Community College, and Farmingdale Agricultural and Technical College—were administering urban center programs.

The easier access permitted by conveniently located urban centers has broadened opportunities for adults, especially those with special needs. To accommodate the needs of adults, emphasis has been placed in three areas: (1) on programs leading to immediate employment in occupations where local and area opportunities exist; (2) on scheduling of programs at times which cause minimum interference with other responsibilities; and (3) on providing related services such as remedial basic education, counseling, and placement assistance.

Government-Sponsored Manpower Training Programs

The recent history of extensive special-purpose government-sponsored manpower training programs begins with the Manpower Development and Training Act (MDTA) of 1962. Through this act, Congress appropriated funds for manpower training programs to alleviate unemployment problems resulting from changes in technological, economic, and industrial conditions. More recently, however, a significant emphasis of these programs is directed at economically disadvantaged individuals. MDTA programs are cooperatively administered by the Federal Departments of Health, Education and Welfare and of Labor, and by their counterpart state education and labor agencies. In New York State, responsibility for administering MDTA programs is shared by the State Education Department and the Employment Service of the State Department of Labor. In fiscal 1970-71, 7,452 persons in New York State were served by MDTA programs.

In 1966, the State Manpower Training Act (SMTA) was created by the New York State Legislature. Similar in principle to the

MDTA, the SMTA provided for the training of individuals who might not otherwise have been reached. Enrollment in SMTA programs for fiscal 1970-71 was 3,535. This program has since been drastically reduced.

One typical approach utilized in MDTA and SMTA programs is the single skill or single occupational cluster offering. Such programs train, retrain, or upgrade individuals for at least entry level employment in specific occupational titles; e.g., licensed practical nurse or automobile mechanic. These "regular" programs incorporate varying amounts of orientation, basic and remedial education, and supportive services. Another program—the "multioccupational" program—operates in densely populated areas where the State Employment Service has identified the need for an ongoing training effort in a large number of varied occupations. Most of the large cities or metropolitan districts in New York State have officially designated "skills centers," operated by public boards of education, where training is provided in the skills required in the local job market. The skills centers are permanently staffed and operate on a continuous basis from year to year. They are located in areas where large numbers require services and tend to serve persons whose employment difficulties are especially severe. Most centers provide, in addition to skill training, individual and group counseling, psychological services, medical assistance, and a wide variety of social services. Where required, training projects may be authorized on an individual basis. In these individual referral programs, trainees are assigned individually to public schools or to private trade and business schools. Also, trainees are exempt from payment of tuition and fees; payment is provided through the manpower program.

Another important approach to manpower training is on-the-job training (OJT) programs. In OJT programs, the trainee is placed directly on the job, preferably with an employer willing to hire the individual after the completion of training. In these cases, the employer and trainee are reimbursed for the difference between actual wages and the student's productive output during the learning period. Some OJT programs are combined with considerable classroom work and/or supportive services.

In addition to MDTA and SMTA programs, a large number of specific purpose training programs have been sponsored by various Federal, State, and local government agencies during recent years. One of the most important is the WIN—Work Incentive Training—

program which became an integral part of the Federal Social Security Act in 1967. While having the same overall purpose as MDTA and SMTA, WIN is designed primarily for recipients of Aid to Families with Dependent Children (AFDC) and children of unemployed parents. It coordinates social welfare services with employment training toward the goal of assisting individuals and families to become self-sustaining. An estimated 14,800 persons in New York State were served in the training component of the WIN program during fiscal 1971.

Other significant manpower programs operating in New York State during 1971 are briefly described below. The list is not meant to provide a complete inventory, but to give some indication of the multiplicity and variety of effort in this area. (Descriptions are paraphrased from the "New York State Comprehensive Manpower Plan for Fiscal Year 1972.")

1. *Public Service Careers* (PSC—New Careers)—Operated by the United States Department of Labor, this program secures, within merit principles, permanent employment in public service agencies for disadvantaged unemployed youth and adults. It also stimulates upgrading of current employees, thereby meeting public sector manpower needs. In New York State during fiscal 1971, an estimated 871 persons were served at a cost of \$2,825,000 in Federal funds.

2. *Job Opportunities in the Business Sector* (JOBS)—Also a Federal Department of Labor program, administered with the assistance of the National Alliance of Businessmen, JOBS encourages private industry to hire, train, retrain, and upgrade hardcore unemployed and underemployed persons 18 years of age and over. An estimated 6,688 persons were served in New York State in fiscal 1971 at a cost of \$16,052,000 in Federal funds.

3. *Operation Mainstream*—Operated by the United States Department of Labor, Mainstream provides counseling, basic education, and work experience for chronically unemployed adults in community betterment and beautification, mainly in rural areas. In New York State, an estimated 278 persons were served during 1970-71 at a cost of \$878,000 in Federal funds.

4. *Neighborhood Youth Corps* (NYC)—Administered by the United States Labor Department, the Youth Corps program is primarily aimed at disadvantaged youth of high school age. However, it includes job preparation for youth who have left high school before completion. Services were provided to an estimated 3,120 out-of-school youth in New York State during fiscal 1971 at a cost of \$10,172,000 in Federal funds. For many clients, this program provides paid work experience rather than actual skill training of post-secondary level.

5. *Concentrated Employment Program (CEP)*—Operated by the United States Department of Labor, CEP provides coordinated manpower and supportive services for hard-core unemployed youth and adults in selected areas where they are concentrated. During fiscal 1971, the training component of CEP served an estimated 5,140 persons in New York State at a cost of \$5,140,000 in Federal funds.

Proprietary Schools

The proprietary schools constitute one of the largest and longest established sectors of noncollegiate post-secondary occupational education. The current provisions of sections 5001 and 5002 of the Education Law require the licensing of private trade and correspondence schools. However, legislation passed this year, and effective July 1, 1973, requires the licensing of private occupational, business, and correspondence schools. Before the revised law, registration for private business schools and certain others has been optional. The new sections 5001 and 5002 of the Education Law place all schools, so licensed or registered, under the jurisdiction of the State Education Department; the added sections 5003 and 5004 deal with private school standards and personnel certification, respectively. In essence, the new law requires the licensing of those proprietary schools, which, heretofore, were not required to register.

1. *Private Occupational Schools*—The greatest portion of this category is composed of what are usually referred to as private trade schools. As of June 1971, 236 private trade schools were licensed to operate in New York State, an increase of seven over the previous year. Licenses are granted to private trade schools for 1 year only. They may be renewed annually if the State Education Department is satisfied that a school meets the requirements of law in such areas as administration, faculty, curriculum, financial responsibility, and facilities and equipment.

In recent years the greatest concentration of private trade schools and enrollments has been in barbering; beauty culture; commercial art; dental, medical, and laboratory technology; drafting; flight instruction; garment trades; photography; and radio and television. Entrance requirements and levels of training vary considerably among courses of study, reflecting the educational and skill requirements of particular occupations.

In fiscal 1970-71, the private trade schools enrolled 82,058 students. Of the 30,828 students who graduated during the year, 13,428, or 43.6 percent, were reported to be successfully placed (approximately 25 percent of the schools did not report on placement activities). If the recent trend continues as anticipated, private trade

school enrollment should increase by approximately 16 percent over the next 10 years.

Under the new legislation, those schools referred to as "Section 129" and "Section 22" schools are also included in the category of private occupational schools. The "Section 129" schools are primarily business machines and computer schools which had chosen to register with the State Education Department under the provisions of Part 129 of the Commissioner's Regulations. Entrance requirements to these schools vary according to the level of training provided; it is estimated that half of the programs offered in "Section 129" schools require a high school or equivalency diploma for admission. As of July 1, 1971, 40 of these schools were registered, with a total enrollment of 6,368 for the 1971 fiscal year.

Twenty-three "Section 22" schools had chosen to register with the State Education Department in accordance with Part 52.22 (c) of the Commissioner's Regulations. This part provides for the registration of "highly specialized institutions requiring high school graduation for admission." Currently registered schools offer preparation for such occupational areas as traffic, banking, technology, design and construction, fashion, credit, and interior design. The "Section 22" schools enrolled an estimated 5,750 students in fiscal 1971.

2. *Private Business Schools*—Part 127 of the Commissioner's Regulations provides for the registration of private business schools which seek to register and which meet established requirements. The 46 private business schools registered during school year 1970-71 offered a wide range of business, sales, and office-related programs, including secretarial science, business administration, accounting, and marketing. Approximately 25,000 students were enrolled in day and evening classes during the school year.

3. *Licensed Correspondence Schools*—Licensed correspondence schools in New York State offer courses in occupations ranging from banking, computer science, and advertising art to dress design and nuclear instrumentation. Like the private trade schools, correspondence schools have varying entrance requirements. Some provide high school equivalency preparation in conjunction with occupational study. The 34 correspondence schools licensed to operate in the State during fiscal 1970-71 reported enrollments of 223,200; of these 23,141 completed and 41,578 dropped out. A majority of these enrollments were in occupational courses. The percentage of enrollees who are residents of New York State is not known. In recent years, enrollments in the licensed correspondence schools have tended to vacillate, but have remained at approximately 200,000. It is anticipated that interest in the independent study provided by licensed correspondence schools will come about as the result of two factors: (1) the policies set forth in this plan that encourage and recognize independent learning beyond high school and (2) the awarding of credit toward regular collegiate degrees through the cooperation between correspondence schools and colleges and toward Regents ex-

ternal degrees for noncollegiate post-secondary educational experiences.

The proprietary schools directly prepare students for employment in specific occupational fields. In many cases, they offer training in specialized areas generally not available elsewhere. The argument is often advanced that, because of their dependence on profit, the proprietary schools are particularly sensitive to changing economic conditions and employment opportunities. These schools complement the public schools. Their contributions must be recognized and fully utilized in any attempt to inventory post-secondary educational resources and to plan for their future development.

A Regents decision permits proprietary schools to award degrees in programs which have been evaluated by the State Education Department and which meet the qualifications for the desired degree. To date, 20 proprietary institutions have been authorized to grant the associate in occupational studies degree (created in 1971) in certain program areas, and one, the bachelor of fine arts degree.¹³⁰ Degree authorization will be extended to additional schools on a program-by-program basis.

As each proprietary school has been authorized to offer a degree-granting program, the State Education Department has inventoried the school's physical facilities. Such inventories have also been conducted at all public and private institutions of higher education in New York State. The additional data from proprietary institutions will assist in planning for the effective utilization of even more resources for post-secondary education.

Apprenticeship Training Programs

Apprenticeship training, the earliest major form of organized occupational instruction, remains an important component of occupational education in New York State today. The "Dictionary of Occupational Titles" defines an apprentice as "a worker who learns, according to a written or oral contractual agreement, a recognized craft or trade requiring two or more years of on-the-job training through job experience supplemented by related instruction, prior to the time that he may be considered a qualified skilled worker." In December 1971, 23,961 persons were in registered apprenticeship programs in New York State. A registered apprenticeship program is one in

¹³⁰ See appendix I, p. 328.

which the sponsor—an employer or a joint apprenticeship committee composed of labor and management representatives—agrees to

1. select apprentices and provide training in accordance with the standards and procedures approved by the State Bureau of Apprenticeship Training
2. accept periodic visits from representatives of the State Bureau of Apprenticeship Training or the Federal Bureau of Apprenticeship and Training
3. provide information to the Regents about the program and apprentices indentured under it.

In 1970-71, approximately 15,000 registered apprentices received related instruction. About 65 percent of these were in the public educational system and about 35 percent were in courses conducted by employers and joint apprenticeship committees. Nearly half of the registered apprentices in New York State are in construction or allied trades. The remainder are distributed among more than 200 trades with relatively high concentrations in carpentry, plumbing, sheet metal working, electrical trades, printing, metal working, machine trades, and service and repair.

Employer and Employee Group Training Programs

The most difficult area of noncollegiate occupational education to define comprises all of the educational and training opportunities financed and operated by private employers. No reliable quantitative information concerning such programs is currently available at either the national or State level. However, the larger employers are deemed the most likely to offer formal training programs.

The objectives of employer-sponsored training programs include higher productivity, lower employee turnover rates, preparation for promotion to new responsibilities, greater safety of operations, and employee satisfaction. Also, there is the possibility of colleges accepting some employer training courses for credit, as is currently practiced by some collegiate institutions; e.g., New York Institute of Technology. Besides labor's involvement in apprenticeship programs, virtually every major trade association has the education of its members as a major purpose. Many associations have designed training programs to upgrade their members, some on a self-study basis and others utilizing regional or national workshops.

The representation of business, industry, and labor on educational advisory committees at all levels and their participation in

State and regional cooperative planning activities should increasingly allow for mutual definition of respective roles, capabilities, and responsibilities.

Other Occupational Programs and Services

This inventory is by no means an exhaustive list of occupational education and training and related services in New York State. A thorough description of the total spectrum would consider in detail such important components as vocational rehabilitation; education and training within correctional institutions; nursing education in hospital schools of nursing; occupational education and training for students in State schools for the deaf, blind, and other groups; programs sponsored by local government and other community groups and agencies in major cities and regions; and programs and services administered by various State agencies including the Division of Youth, Civil Service, and Mental Hygiene.

Unit 2: Education for Making a Life

Men and women are more than just workers in a society; they are also human beings with a variety of personal needs. Their concerns for improving the quality of life are expressed in pursuits such as becoming better citizens and taking a more active interest in public life, improving their family life, and enriching their lives as individuals. Several noncollegiate post-secondary educational programs, which speak to these concerns and pursuits, are provided in New York State.

Programs for Public Life

Many seek programs of education beyond high school to enhance their understanding and participation in public life. The educational programs currently available range from a course in how to become a citizen to courses in the intricacies of international affairs and relations. Broadly viewed, courses in this range are designed to meet the needs of all of those who want to sharpen their understanding of the world in which they live.

1. *Americanization*—During 1970-71, a total of 600 courses under the heading of Americanization were provided in New York State. These combined to serve 10,725 students, the large majority of which—8,796—were enrolled in the “English for foreign born” program courses; 1,864 attended courses in the “citizenship preparation” program and 65 attended other courses serving aliens.

2. *Civic and Public Affairs*—Over 8,000 individuals enrolled in a variety of courses offered through the “civic and public affairs” instructional programs in the State during 1970-71. About 150 courses provided instruction in the following areas:

| <i>Instructional Program</i> | <i>Number Enrolled</i> |
|------------------------------------|------------------------|
| Local and State Affairs | 3,035 |
| Community Ambassador | 918 |
| National and International Affairs | 174 |
| Student Activism | 60 |
| Other Courses | 4,125 |
| Total—Civic and Public Affairs | 8,312 |

In courses provided through these programs for public life, the structure and functioning of the “web of government”—local, State, national and international—can be explored by the students. Intergroup and intercultural relations can be systematically examined. International problems can be considered and international relations can be surveyed, both in their normal and crisis forms.

Programs for Family Life

Occupational skills and an awareness of the world around us are valuable indeed, but do not guarantee a sound family life. To build such a family life requires knowledge and understanding of a special order. Hence, there is a need for courses relating directly to homelife and embracing all aspects of family living. Many seek such educational programs for aid in child guidance, problems of adolescence, mental hygiene, parent education, and home economics.

1. *Home Economics Education* (nonoccupational)—Almost 45,000 adults enrolled in nonoccupational home economics courses in the State during 1970-71. Over 2,500 such courses were offered in several instructional programs; program enrollment was distributed as follows:

| <i>Instructional Program</i> | <i>Number Enrolled</i> |
|--|------------------------|
| Clothing and Grooming | 29,186 |
| Housing and Home Furnishings | 5,197 |
| Food and Nutrition | 4,049 |
| Family Relationships | 694 |
| Home Management (Budgeting) | 145 |
| Other Courses | 4,548 |
| Total—Nonoccupational Home Economics Education | 43,819 |

2. *Parent Education*—During 1970-71, 39 school districts in the State offered 172 courses under the heading “parent education.”

Although all of the teachers in this program were part-time, more than 14,000 adults enrolled in the courses. This area attests to the need for and desire of parents and other adults to involve themselves in discussions about the so-called "generation gap," the use of drugs, and a host of other topics that are becoming increasingly meaningful.

Programs for a Richer Life

The preceding subsections discuss educational programs serving the needs of people in various roles: worker, citizen, homemaker, and parent. However, educational programs must be provided also to serve people as living individuals. This is particularly true in an era when the individual is experiencing more leisure time and when humanistic education is attracting higher priority. Noncollegiate post-secondary education offers significant opportunities for individuals to enrich their minds and spirits in pursuing the higher satisfactions of living. This involves providing a wide range of courses at varying levels of complexity. The following self-enrichment courses are offered in public school programs:

1. *General Academic* (noncredit)—Over 15,000 individuals enrolled in the 972 general academic courses offered in 1970-71 in the State. About two out of three of these persons studied foreign languages, and the remaining students pursued reading improvement and other academic courses.

| <i>Instructional Program</i> | <i>Number Enrolled</i> |
|------------------------------------|------------------------|
| Foreign Languages | 9,701 |
| Reading Improvement | 1,391 |
| Other Academic | 3,966 |
| Total—General Academic (noncredit) | 15,058 |

2. *Cultural Education*—Participating in and studying the arts provide many avenues for the enrichment of individuals and the addition of new values to their daily living. Through the study of the arts, the character and quality of personal living are enriched; the individual discovers his creative abilities and extends his cultural interests and knowledge.

During 1970-71, 52,152 individuals enrolled in programs of cultural education and spent well over 1 million class/hours in courses offered in crafts, arts, music, and drama.

| <i>Instructional Program</i> | <i>Number Enrolled</i> |
|------------------------------|------------------------|
| Crafts | 20,280 |
| Art | 20,002 |
| Music | 10,645 |
| Drama | 1,225 |
| Total—Cultural Education | 52,152 |

3. *Business Education (nonoccupational)*—In addition to the many opportunities provided in occupational business education (discussed in unit 1 of this section), noncollegiate programs of business education are offered for reasons other than employment. A broad range of courses is available for individuals to develop and sharpen their personal skills related to the world of business. During 1970-71, enrollment in nonoccupational business education programs in the State was distributed as follows:

| <i>Instructional Program</i> | <i>Number Enrolled</i> |
|---|------------------------|
| Personal Use Typewriting | 6,137 |
| Investments | 1,325 |
| Law Everyone Should Know | 752 |
| Estate Planning | 391 |
| Money Management and Banks | 238 |
| Other Courses | 3,955 |
| Total—Business Education (nonoccupational) | 12,798 |

4. *Health and Safety Education (nonoccupational)*—New York State provides a variety of instructional programs in health and safety education. In 1970-71, over 6,000 courses were attended by 129,891 adults across the State.

| <i>Instructional Program</i> | <i>Number Enrolled</i> |
|--|------------------------|
| 3-Hour Prelicensing Program | 73,482 |
| Physical Education | 33,952 |
| Drug Abuse Prev. Ed. | 7,590 |
| Driver Education | 7,522 |
| Heart Disease Prevention | 405 |
| Smoking Withdrawal | 307 |
| Other Courses | 6,633 |
| Total—Health & Safety Education (Nonoccupational) | 129,891 |

5. *Other Enrichment Programs*—Several other self-enrichment educational programs are available for adults in New York State. The two largest programs are "senior citizen education" and "adult guidance" which together offered more than 2,500 courses during 1970-71.

| <i>Instructional Program</i> | <i>Number Enrolled</i> |
|---------------------------------|------------------------|
| Senior Citizen Education | 15,205 |
| Adult Guidance | 6,154 |
| Other Courses | 5,958 |
| Total—Other Enrichment Programs | 27,317 |

The significance of these programs, which serve the vast number of people opting for a better life, cannot be underestimated.

This area of noncollegiate post-secondary education alone provided educational and personal opportunities that were taken by nearly a quarter million individuals in New York State.

Section 3: Assessment of Needs

A simple inventory of programs and services leaves no question of the multiplicity, extent, and variety of noncollegiate post-secondary education and training opportunities in New York State. The important questions which remain are (1) to what extent is the current delivery system adequate to meet the needs of people in New York State in the coming years and (2) what changes in the system would enable it to meet these needs as efficiently and effectively as possible?

The need for development and change in occupational education beyond high school is expected to increase in the years ahead. Whether present trends continue or, as many predict, accelerate, constant and profound changes can be expected in the nature of work performed by our society. Specific changes are difficult and, in many cases, impossible to predict, but a number of long-term trends are clearly evident. The percentage of the labor force made up of unskilled workers will continue to decline. The percentage of the labor force involved in agriculture and manufacturing will also continue to decline. There will continue to be corresponding increases in the percentage of the labor force employed in service-related occupations. Technological and other industrial changes will continue to raise levels of productivity, resulting in the reduction of man-hours required for the completion of any given project. Also, an increase in knowledge and skills will be required of workers in many occupations affected by technological change.

Still another factor to be considered in assessing the level of need for occupational education beyond high school is the recurrence of relatively high unemployment and underemployment during periods when aggregate demand for goods and services lags. During such periods, occupational education can retrain some persons for occupations in which demand persists. These are often occupations which require higher levels of knowledge and skill than most job-seekers currently possess. Since the basic problem during periods of "cyclical" unemployment is shortage of demand rather than of supply, the role of occupational education must be complementary to a

broader approach involving fiscal, monetary, and income maintenance policies.

Thus, over the next 10 years, New York State's occupational education delivery system must respond with appropriate programs and services for people whose lives are affected by continuing problems of poverty and disadvantage, by changes in the nature of work resulting from industrial and technological trends, and, to a lesser extent, by short-term problems resulting from recurrent periods of economic downturn. At the same time, the call for programs and services to cope with specific problems and changes must not obscure the broader purpose which has been the theme of this plan; i.e., the need to provide a comprehensive range of education beyond high school for all persons who seek to further their personal as well as occupational development.

There has been strong social approval for climbing the educational ladder to higher and higher rungs after compulsory schooling has been completed. Often, this approval has been expressed in conjunction with getting a better job or higher pay. There is also a constantly widening vision of educational possibilities for a larger and larger proportion of the people.

Two limiting ideas have hampered the realization of the full potential of individuals: (1) the idea that, at some stage, individuals have had enough education and that, at the selected point, they should put away education and turn to the more serious business of life and (2) the idea that, if individuals choose to continue their education beyond high school, they should necessarily go to college. The first idea stands in opposition to a more creative one that views education as an inherently "open-ended" process which can never be definitely completed as long as life lasts. The second idea inhibits the range of an individual's choices; it opposes a more comprehensive idea of post-secondary education that promotes an infinite number of alternatives and combinations by which an individual may pursue education beyond high school.

Noncollegiate post-secondary education is characterized by diversity. Preserving this diversity is essential if programs hope to be commensurate with the needs and styles of adults and out-of-school youth. In the final analysis, a society can only be as good as the people composing it, operating it, and making the decisions that determine its course. Assessing the different needs of adults and out-of-

school youth and providing a variety of options for education beyond high school to match those needs are prerequisites for individual self-improvement—with the expectation that better individuals will contribute to a better society. Noncollegiate post-secondary education should, therefore, command as much social approval and support as any other form of education.

Section 4: Issues, Problems, and Directions

The programs described earlier in part IV of the plan, when properly coordinated and adequately supported, constitute most of the necessary elements of a comprehensive delivery system in New York State for meeting the education and training needs of adults and out-of-school youth who are high school graduates or the equivalent. The remainder of this section describes major problems to be solved and major directions and actions to be taken.

There is a need for comprehensive planning arrangements that work. Arrangements must be developed at the State level, and in each region of the state, for participatory planning of a coordinated approach to assess and meet occupational education and manpower needs. The responsibility for leadership and coordination of the planning processes rests with the established occupational education agencies of the State and the various regions—the State Education Department, the State University of New York, the public schools, the Boards of Cooperative Educational Services, 2-year public and private colleges, as well as proprietary schools. Planning arrangements must involve all agencies and groups which administer, or have direct concern for, occupational education programs and related services. Also, the plans developed through such arrangements must recognize and utilize all of the educational resources of these agencies and groups. The responsibilities of the State and regional planning mechanisms should include the following:

1. articulating and coordinating the occupational education programs of the public schools and BOCES with the programs of the public and private 2-year colleges, urban centers, and proprietary schools
2. coordinating the planning of occupational education programs operated and funded within the public schools and colleges with the various Federal, State, and local government sponsored manpower training programs
3. identifying the respective roles of public and private occupa-

tional education agencies to minimize duplication of resources and effort and to maximize variety and quality of opportunity

4. insuring the fullest possible utilization of the training capacity of private business and industry

5. providing resources at central locations within each region's educational system, whether public or nonpublic, which insure that every adult or out-of-school youth in need of training or related services can receive either direct assistance or referral to the kind of program which best meets his needs

6. actively involving in the planning process all community groups affected by occupational education—including students, parents, teachers, business and industry, labor, and government—through advisory councils as well as less formal channels of communication.

A comprehensive manpower policy at the Federal and State levels is needed to enable the State to use its resources for serving adults and out-of-school youth in a more coordinated, nonduplicative, cost-effective manner. For some time Congress has been considering a comprehensive manpower bill to unify under one title most of the federally sponsored manpower training programs described earlier. Proliferation of training programs to meet specific needs has led to duplication of effort and wasteful competition for scarce resources among the many agencies charged with administering these programs. Division of responsibility and authority among numerous agencies has made a concerted attack on manpower problems almost administratively impossible.

The Regents support the effort to create a comprehensive manpower policy. Such a policy would be a major contribution to New York State's efforts to coordinate occupational education and manpower programs through the State and regional planning processes outlined above. It is of the greatest importance, however, that this policy enable the states to plan and coordinate manpower training programs within the total framework of their public and private educational resources. If this policy were to remove direct responsibility for such programs from the established educational authorities of the states, it could undermine the concept of a comprehensive educational system.

Occupational education for adults must increasingly be designed as one phase in a continuum of career-related educational experiences, beginning in the early school years and continuing or recurring throughout life. During recent years, emphasis in occupational education has rightfully and necessarily been placed on programs de-

signed to remedy educational and occupational limitations that have prevented students from enjoying full economic opportunity. While the need for the remedial type of adult program will remain strong until our society has full and equal opportunity, a system which prevents, rather than reacts to, educational and economic disadvantage must be designed and implemented. In such a system, noncollegiate occupational education, as well as other forms of post-secondary education, will become a normal and expected experience at any stage of life.

Noncollegiate occupational or continuing education for adults will increasingly be recognized as part of a more comprehensive educational system which includes elementary and secondary education on the one hand and collegiate forms of post-secondary education on the other. Full advantage should be taken of the relationships between noncollegiate and collegiate post-secondary education. There must be ease of mobility within and between the noncollegiate and collegiate options available to students. The collegiate structure must be so organized that students will be able to have their noncollegiate experience assessed and, where warranted, be given collegiate credit for this experience. The State and regional participatory planning arrangements which will be represented by both the collegiate and noncollegiate sectors should facilitate the development of criteria for such assessment.

Recognition of the value of noncollegiate post-secondary education is a responsibility of our entire society, not of educational institutions alone. Much depends on the willingness of employers to make requirements for employment realistic in terms of the work actually performed. Insistence on academic credentials which have little or no relationship to the actual nature of work performed must be discouraged. It will tend to perpetuate a lock-step hierarchy of educational levels and inhibit development of the comprehensive system of varied opportunities proposed in this plan.

A more adequate management information system is needed to enable administrators to plan, manage, and evaluate a comprehensive system of post-secondary education, which includes the noncollegiate sector. An adequate management information system would provide administrators of individual programs, as well as those responsible for the State and regional planning processes, with the following:

1. More reliable and compatible information concerning the need for educational programs and services, including identification

of target populations and analysis of manpower needs, employment opportunities, and individual educational needs;

2. Analysis of job performance requirements to facilitate development of curriculums and of evaluation techniques relevant to actual conditions in the world of work; and analysis of personal needs for educational upgrading, etc., in lieu of increased leisure time;

3. Compatible information concerning the current and anticipated status of program capacity, enrollments, and output among the various sectors and components of noncollegiate post-secondary education; and

4. Information needed to evaluate the efficiency and effectiveness of various programs and strategies in relation to the goals and objectives of noncollegiate post-secondary education programs, including extensive followup studies of persons who complete these programs.

Section 5: Shaping the Future

The Regents recognize the indispensable contribution of noncollegiate post-secondary educational resources in developing a truly comprehensive system of education beyond high school. Future policy and planning must be directed toward the full integration of these resources. To that end, the Regents recommendations are presented.

To preserve the diversity of post-secondary education, particularly the wide range of opportunities provided in noncollegiate settings, the Regents recommend that

73. post-secondary educational programs be evaluated on their own merits, regardless of the type of institution offering them
74. planning arrangements, both statewide and regional, involve the active participation of the noncollegiate sector.

To accommodate the uniqueness of individuals with different needs, the Regents recommend that

75. student financial aid programs incorporate additional provisions for adults who wish to continue their education beyond high school
76. students be permitted the choice of applying financial assistance to any post-secondary educational programs in the State, including noncollegiate programs.

To enhance the coordination and effective utilization of post-secondary educational resources in the State, the Regents recommend that

77. a comprehensive management information system be devel-

oped, generating compatible data on the current and anticipated status of all education beyond high school in the State concerning programs, enrollment and graduates, facilities and capacity, faculty, and finances.

To offer increased opportunities for education beyond high school to more individuals, especially adults, the Regents recommend that

78. collegiate and noncollegiate institutions establish cooperative relationships with each other and the world of work for their mutual benefit and for the benefit of students in choosing combinations of study and work activities.

To broaden the concept of post-secondary education and thus offer a wide spectrum of viable alternatives for education beyond high school, the Regents recommend that

79. formal borderlines between collegiate and noncollegiate post-secondary education be erased through the development of a comprehensive system of post-secondary education that involves no distinction in status.

The Second Division: The Review And Analysis of Sector Master Plans

This division contains the review and analysis by the Regents of the master plans of the three sectors of collegiate post-secondary education (State University, City University, and the private colleges and universities) and one sector of noncollegiate post-secondary education (selected proprietary schools: Albany Business College, Bryant and Stratton Business Institute, and Sadie Brown's Collegiate Institute). In analyzing the master plans of post-secondary institutions, the Regents concerned themselves with the way that the master plans of these sectors complemented the policies, goals, objectives, and priority concerns expressed by the Regents in their long-range plans for education beyond high school in the State of New York. Therefore, the analysis of the sector master plans is reviewed, first, in terms of the recommendations which each sector of post-secondary education has made to the Regents with regard to the direction it intends to develop its educational programs in the next decade. The Regents have asked: Are these consistent with the overall goals of the State? Do they meet the educational needs of the State? Are they appropriate for that type of institution? Second, each plan is examined in terms of its responses to the priority concerns which were announced by the Regents in 1971.¹³¹

The Regents position statements pertaining to the recommendations of each of the sectors of post-secondary education are delineated into four categories: approved, approved with condition, deferred, or disapproved. These statements are based upon (a) the way that the plans of the sector fit into the total plan of the Regents for post-secondary education and (b) the Regents judgment of the soundness of the proposal. "Approved" means that the recommenda-

¹³¹ See appendix K, p. 343.

tion meets the overall goals of the Regents and therefore the sector is encouraged to move ahead in that area.¹³² The second category of responses made by the Regents, "approved with condition," means that the institution must develop a more detailed and comprehensive plan and submit it to the Regents before planning for that recommendation moves too far ahead. The third category of responses made by the Regents, "deferred," means that the recommendation does not appear to be in the best interest of post-secondary education at this time. A fourth category of responses, "disapproved," means that the Regents do not approve of the sector moving ahead with this recommendation.

¹³² This is intended to mean developmental approval. Where necessary, master plan amendment approval must be obtained from the Regents before the program is implemented.

Part I: The Review and Analysis of Collegiate Post- Secondary Education Master Plans

This review and analysis is of the master plans submitted to the Regents by the State University of New York, The City University of New York, and the private colleges and universities of New York through the Commission on Independent Colleges and Universities of New York. The Regents compliment the higher education sectors for the cooperation, timeliness, and thoroughness of their planning efforts.

Section 1: The Review and Analysis of State University's Master Plan

The master plan of State University reflects the university's commitments to support expanded educational opportunity and to enact major program changes which will serve a constituency with a wide variety of backgrounds and educational needs. The Regents compliment the university for its development of so comprehensive, coherent, and integrated a plan for the next decade. The plan also gives recognition to the fiscal realities of the 1970's and strikes a balance between extending programs and conserving resources.

The Regents wish to highlight four specific areas of concern which they have with respect to the plans of the State University and urge the university to be ever cognizant of these concerns of the Regents as it implements its plans during this next decade. These concerns relate to (1) admissions policy, (2) meeting the needs of minority communities, (3) transfer policies, and (4) the university's relationships to nonpublic institutions.

Admissions Policy

During the last several years, the university centers and a majority of the other 4-year institutions of the State University have had to limit admissions for the most part to what appears to be a

relatively educationally elite group of students. These policies were more the result of fiscal constraints and space limitations than of university educational policy. In establishing high cutoff scores for admissions to limit entry to the number of students who could be accommodated, the university relied heavily upon high school achievement and scholastic aptitude examination scores. Since high school achievement tends to be related to socioeconomic status, the policy had the effect of admitting a high proportion of students from high socioeconomic groups. In fact, the income distribution of students at State University roughly parallels the income distribution of students who attend nonpublic institutions in the State. While public institutions should serve a broad spectrum of citizens, State University should concentrate its efforts on meeting the needs of students from lower socioeconomic groups who look to public higher education as their only real possibility for post-secondary education.

The Regents are pleased that in this master plan the State University seeks to channel its efforts to a broader constituency in three ways: (1) extending the proportion of high school graduates that will be admitted to 4-year institutions, thereby permitting reduction in cutoff scores; (2) establishing criteria in addition to scholastic achievement as the basis for admission; and (3) seeking a wider cross section of students both in initial admissions and through transfer policies.

The Regents hope that the university will continue to reexamine its admissions policies in an effort to serve a larger proportion of students from lower socioeconomic groups, a mission which the Regents believe is an appropriate one for public institutions.

Meeting the Needs of Minority Communities

The State University, during the last several years, has extended admissions opportunity and employment opportunity to members of minority groups. The extension of programs in these areas parallel roughly the efforts of nonpublic institutions. Despite this effort, the 2-year and 4-year colleges in the university system exhibit low enrollments of minority students and low employment levels of members of minority groups on its professional staffs. The State University's 1972 master plan recognizes this problem. Steps are reflected in the plan to correct this problem.

The Regents therefore commend the State University for the importance it has attached in its master plan to the need to extend

further opportunities to minority students in various sections of their master plan. The Regents approve also the commitment of the State University to the racial integration of living and educational facilities. They approve and commend the university on the special efforts that it plans to undertake for the recruitment of qualified faculty members from minority groups and of students from minority communities.

Transfer Policies

The State University's open admissions plan relies heavily upon the community colleges as a point of entry into the university system. In its plan, the State University guarantees each 2-year college graduate a place somewhere in its system and has established a mechanism for fulfilling this commitment on a universitywide basis. The Regents would like to see the plan go further still by providing community college graduates preferential transfer opportunities. The Regents believe that the State University ought to give transfer students graduated from a 2-year college first priority in admission to 4-year colleges and after admission accord them the same privileges as students who enter the 4-year colleges directly out of high school.

The Regents note that the State University plans to increase transfer opportunities significantly during this next decade. Even so, the expected growth of 2-year college enrollments projected during this next decade will so increase the number of students graduating, that it appears doubtful that the State University alone can meet the transfer needs. In order to save the taxpayer money and to make maximum use of all educational resources, the Regents believe that nonpublic institutions can and should play an important role in helping to meet the educational needs of 2-year college graduates. Since most such students tend to come from lower socioeconomic groups, the Regents urge the State University to support a student financial support system which would enable a substantial number of 2-year college graduates to elect to transfer to a 4-year nonpublic institution. Details of the Regents proposal are presently being developed.

Relationship to Nonpublic Institutions

The extension of educational opportunities by a public university system is bound to draw some number of students away from the nonpublic sector. During this last decade, the expansion of the State University has had an impact upon enrollments at nonpublic institutions. During this next decade, nonpublic institutions stand to

lose significant numbers of freshmen to the public sector. As a public institution, the State University is expected to have its operating costs largely government-subsidized, thereby permitting it to charge tuition well below the cost of its educational and support service programs. Clearly, students would prefer to receive the highest quality education available at the lowest cost, and therefore a public institution has a competitive advantage in being able to attract students from all economic groups. The system of tuition subsidization available to the public university imposes upon the State the responsibility to take such measures as it reasonably can to permit the maintenance of a strong nonpublic system of higher education.

The Regents believe that public policy is best served by maintaining a strong and viable alternative to public higher education, both because it affords students and parents choices in the mode of education and because nonpublic institutions are not as subject to shortrun enrollment limitations due to shifts in State program priorities and State financing capabilities.

The Regents are concerned over the condition of nonpublic institutions during the next decade, and their comments on aspects of the State University plan seek to promote ways in which private institutions can help meet public needs. They especially urge that the State University cooperate with private institutions in maintaining and operating admissions services, educational opportunity centers, and similar programs which benefit both public and nonpublic institutions. The Regents prefer that the State University and nonpublic institutions join as equal partners in operating programs that serve their mutual interests.

The Regents are also concerned with the State University proposals that seek to extend the scope of its educational programs into areas which are now being served by nonpublic institutions. For example, the State University proposes upper division, technical centers to accommodate transfer students from the 2-year institutions. The engineering schools and technical institutes of this State have the capacity and the interest to meet this need. What is needed in this area is not a new institutional structure, but rather a program and mechanism which would permit 2-year college graduates to take advantage of the nonpublic resources now available.

The Regents support the State University's efforts to develop, slowly and deliberately, centers of doctoral excellence at the university centers. They do express concern about the extension of doctoral

studies, in traditional disciplines, at the State University in areas where the nonpublic resources of the State are more than adequate.

Unit 1: The Consideration of the Recommendations of the State University's Master Plan

With the above expressed concerns, the recommendations of the master plan of State University are analyzed against the four criteria set forth in the introduction to the second division: (1) recommendations approved, (2) recommendations approved with condition, (3) recommendations deferred, and (4) recommendations disapproved. Unless specific approval is extended to any activity mentioned in the following review, no approval is implied or intended.

There were 85 recommendations made by the university for Regents response. Of the 85 recommendations made by the university, the Regents have approved 55; approved 23 with condition; deferred six; and disapproved one. They are as follows:

APPROVED

I. *The Students*

A. The Points of Entry

1. Educational opportunity centers will be located in every major region of the State for the use of those whose educational preparation has been deficient. The centers will provide appropriate counseling and diagnostic testing for college readiness.

Regents Position: APPROVED

2. Insofar as feasible, each community college of the university will guarantee, to every high school graduate in its service area, admission to a suitable program. The university will seek to influence students to consider the community college as an appropriate point of entry for post-high school education.

Regents Position: APPROVED

3. A deferred admissions procedure will be developed that will permit students to enroll at a campus of the State University and then pursue a period of work, service, or travel before formally coming to the campus for study.

Regents Position: APPROVED

4. A "step-out" program will be developed that will permit planned leaves of absence from formal study without academic penalty, and will provide for periods of work, travel, and independent study and a subsequent return to the campus for the completion of the student's educational objective.

Regents Position: APPROVED

5. An experimental "contract for continued learning" arrangement will be introduced through which a student, upon graduation, may develop a plan for continued learning through his work-career period, working in close consultation with a faculty mentor.

Regents Position: APPROVED

6. An "educare" program will be developed in which an educational program for retirees will be offered on campus and in retirement homes and other places of easy access. Such a program will seek to overcome the financial and procedural barriers which often make continued learning during the later years inaccessible to many retired citizens.

Regents Position: APPROVED

A commendable concept which the Regents will support in the budgetary debate.

B. The Admissions Procedures

1. Regional college locator centers will be established to help prospective students assess their abilities for college study and to discover college opportunities in private as well as public institutions. The State University will welcome active participation by nonpublic colleges in the planning for and functioning of those centers.

Regents Position: APPROVED

2. The senior campuses will serve proportionately greater numbers of upper division students by continuing to move toward a 40-60 percent ratio between lower and upper divisions in order to provide ready access for transfer students.

Regents Position: APPROVED

3. Transfer from a 2-year college to a senior campus will be guaranteed to all students completing an associate degree program and desiring to continue toward a baccalaureate

degree. The campuses in each State University coordinating area will be primarily responsible, as early as is feasible, for ensuring that this commitment is fulfilled for graduates of the 2-year colleges within the area.

Regents Position: APPROVED

The Regents hope that the university will make every effort to insure that the student is admitted to the campus of his first preference insofar as is possible.

4. A profile of students admitted and rejected will be prepared annually by each senior institution. Such profile data will be made available for the guidance of students and counselors, and an active program of consultation with high school guidance counselors regarding admissions opportunities and criteria for admission at the senior campus will be conducted.

Regents Position: APPROVED

C. Student Cost and Financial Aid

1. A student financial aid program will be provided at the graduate as well as the undergraduate levels to assure that middle- and low-income students will not be penalized by the university's tuition schedule. Guidelines for financial aid will be the same for students attending community colleges as for students attending State-operated campuses. Additional financial aid and work-study programs to help defray the cost of higher education for economically disadvantaged youth and adults will be continued and expanded.

Regents Position: APPROVED

D. The Enrollment Commitment of the University

1. The university projects enrollment on the community college campuses to increase at a rate of approximately 7,500 full-time equivalents per year, from 151,000 FTE's in 1972-73 to 211,000 FTE's in 1980-81.

Regents Position: APPROVED

2. The university projects enrollment in new and experimental programs to grow at a rate of approximately 4,100 full-time equivalents per year, from 1,700 FTE's in 1972-73 to 35,500 FTE's in 1980-81. This enrollment in Empire State College and in other new programs or special population

sectors will be a component within the foregoing State-operated and community college enrollments combined.

Regents Position: APPROVED

E. The Quality of Campus Life, Including Student Affairs

1. The arrangements for living on campuses and the social activities provided by the university will be based upon policies which encourage maximum communication among people; the removal of racial, economic, and educational barriers; and the building of greater understanding among students, faculty, and others who differ in social, cultural, and racial backgrounds.

Regents Position: APPROVED

2. Voluntary associations by any constituencies of the university are encouraged if such associations are established and used for the educational development of those involved and are consistent with existing law and university policy. In no instance, however, will such an association be permitted to exclude any individual of the campus from membership, participation in functions, or access to facilities because of race, religion, or ethnic origin.

Regents Position: APPROVED

Care must be taken that de facto exclusion does not occur through the actions of informal groups.

3. Experimental programs will be introduced which seek to break down the age barriers, which higher education currently reinforces, by encouraging people of various ages to move freely on the campus.

Regents Position: APPROVED

4. The university will assure that students will have available essential supportive services. Insofar as is possible, such services will be provided through or in conjunction with the community. Only where such arrangements are not available beyond the campus or when the use of community services will result in a burden too great for the resources of the community will the services be provided directly by the university.

Regents Position: APPROVED

II. *The Academic Program*

A. Precollege Programs

1. Additional "university in the schools" activities will be introduced and maintained in order to provide collegiate and precollegiate enrichment studies for students still enrolled in high school.

Regents Position: APPROVED

B. The First 2 Years

1. Amendment of the community college law and revision of administrative regulations will be sought by the university, where necessary, to align the community colleges more closely to the overall educational, administrative, and fiscal structure and program of the State University.

Regents Position: APPROVED

2. The 2-year colleges will experiment in developing expanded work-study programs through which students may interrupt their formal academic programs to pursue work experience and further learning through apprenticeship arrangements.

Regents Position: APPROVED

C. Baccalaureate Studies

1. Senior campuses will be encouraged to expand the "contract" study approach for selected students who, in extensive consultation with faculty, will outline a personal program of study specifically designed to meet individual interests and a clearly defined educational objective.

Regents Position: APPROVED

D. Graduate Studies

1. Credit for master's and doctoral degree programs among State University campuses will be increasingly coordinated so that master's work at one campus will be accepted for full credit in an appropriate doctoral program at other campuses.

Regents Position: APPROVED

2. Experimental nonresidential study programs for master's degrees will be developed in several carefully selected fields where such a pattern of study seems justified. The new programs will serve as pilot operations with carefully estab-

lished standards and ongoing assessment of student progress and achievement.

Regents Position: APPROVED

3. Graduate study in new multidisciplinary and interdisciplinary fields will be encouraged without, at the same time, prejudicing the existing departmental structure through which essential advanced study must be achieved.

Regents Position: APPROVED

E. Health Sciences Programs

1. Preparation of new kinds of health professionals will be encouraged at each health sciences center and at other selected State University campuses in order to develop efficient health care teams.

Regents Position: APPROVED

2. New models of health care delivery will also be designed in order to meet more effectively the specific health care needs of the communities adjoining each of the university's health sciences centers.

Regents Position: APPROVED

The Regents expect that the results of such experimentation will be disseminated widely.

F. Teacher Education Studies

1. The undergraduate curriculum in teacher preparation will be reexamined and continued emphasis will be given to the practicum experience in the preparation of teachers.

Regents Position: APPROVED

2. The continuing education program for teachers will be expanded and improved, stressing the need for continued professional development through seminars, institutes, and class visitations which will be a part of, and not added to, the professional assignments of teachers.

Regents Position: APPROVED

3. Additional paraprofessional programs will be developed, especially in the 2-year colleges, geared to prepare people who will be able to assist the classroom teacher effectively in supportive activities.

Regents Position: APPROVED

4. The University will seek to balance the demands of student aspirations and societal needs in teacher education programs by encouraging interested students to enter programs for teaching the educationally handicapped and the culturally diverse.

Regents Position: APPROVED

G. International Studies

1. International studies programs to be developed will focus especially on non-Western areas of the world and on those European countries for which present university programs are largely undeveloped.

Regents Position: APPROVED

2. Funding for international education will be supplemented whenever possible through cooperative arrangements with public and private agencies. Budget support for all study-abroad programs will be at the average level granted to upper-division instruction.

Regents Position: APPROVED

H. The Length of Baccalaureate Study

1. An industry-education learning program will be developed for adults of post-high school age. Such work-study arrangements will seek to experiment with a 4-day work, 1-day study week model which will provide, through university planning, mini-courses, released time instruction, short-term workshops, and institutes to fill constructively the expanding leisure period.

Regents Position: APPROVED

III. *The Professional Staff*

1. The university will redirect its recruitment program to insure that information about State University and about vacancies in the university is made available to members of minority groups and to women. The university will continue to encourage minority group members and women to apply for positions with the university.

Regents Position: APPROVED

2. The candidate selection process for employment and for promotion will be carefully reviewed, especially the ways by

which job criteria are applied to individual candidates, to insure full equality of opportunity in the selection process.

Regents Position: APPROVED

3. The university will endeavor to see that any existing inequities in salaries or in opportunities for tenure and promotion for women and minority group members who are presently members of the university staff are not continued.

Regents Position: APPROVED

4. The number of distinguished teaching professorships within the system will be expanded.

Regents Position: APPROVED

5. The number of distinguished research professorships will be expanded to give special recognition to the value of independent advanced research and artistic endeavors.

Regents Position: APPROVED

6. Special attention will be given to securing professional staff whose training, experience, and teaching skill uniquely equip them to serve students from culturally different or educationally disadvantaged backgrounds.

Regents Position: APPROVED

IV. Resources for Learning

A. Library

1. Development of excellent libraries throughout the State University of New York will continue to have a high priority, and they will continue to be the central and primary learning resource for campus and noncampus study.

Regents Position: APPROVED

However, all library programs must be developed within the requirements of the 3R's Systems.

2. State University's libraries will be available to Empire State College students, to students registered in other lifelong-learning in offcampus programs and insofar as possible, to the general public in each community.

Regents Position: APPROVED

V. Research

A. Scholarship and Research

1. The dissemination of research and scholarship will be ex-

tended by modifying the university's copyright and patent policies in order to bring the scholarly and creative activity of its faculty to full public benefit.

Regents Position: APPROVED

VI. *Interinstitutional Relationships*

A. Collaboration With Nonacademic Institutions

1. Among its commitments to public service, the university will especially seek opportunities to serve educational and other public purposes at the same time by rendering specialized education and training to personnel of nonacademic institutions and by enabling its own students to assist those institutions during study in their operating locations.

Regents Position: APPROVED

2. Regular studies of manpower trends and of the needs of the major public and private institutions of the State and the localities will be used to guide periodic revisions of the university program so that those institutions can effectively draw their personnel from among the graduates and former students of the university.

Regents Position: APPROVED

B. Cooperation Among the Campuses of the University

1. The State University will continue to organize itself regionally into four major coordinating areas and to develop subregions within each area as educational and administrative needs so determine.

Regents Position: APPROVED

2. Staff support from the chancellor's office will be made available to each region to support project activity.

Regents Position: APPROVED

3. Councils composed of all campus presidents in a region will be responsible for determining overall regional policy and will give general impetus to cooperative endeavors.

Regents Position: APPROVED

C. Collaboration With Other Institutions

1. State University of New York will participate actively in regional and statewide interinstitutional planning by working cooperatively with the regional advisory councils and con-

forming to the guidelines developed by the Board of Regents and under the general administrative jurisdiction of the Commissioner of Education.

Regents Position: APPROVED

2. Within a framework of guidelines and statewide higher education plans developed by the Board of Regents, the State University will encourage and contribute to the development of cohesive plans and joint policies for the entire public sector of higher education, and especially will seek consistency between its own plans and those of The City University of New York.

Regents Position: APPROVED

VII. Governance

1. The Council of Presidents will serve as an advisory cabinet to the chancellor in matters of emerging new policy or universitywide administrative affairs.

Regents Position: APPROVED

2. Universitywide advisory units representing the faculty, students, and nonteaching professionals will be designated or strengthened for the purpose of formulating and communicating to the chancellor the views of all prime constituents. The chancellor will consult with each group regularly on questions of important policies and actions of the university.

Regents Position: APPROVED

3. The university will clarify the role of the college councils in governance, with particular reference to their responsibility to develop and maintain mutually valuable relationships between the campus and its surrounding community, and to implement university policies on the campus in the most effective ways.

Regents Position: APPROVED

4. The university will distinguish between the functions of governance carried out as described above and the process of collective bargaining. The university will not formally recognize any agent for both purposes concurrently.

Regents Position: APPROVED

VIII. *Accountability*

1. Opportunity for the public to become better informed on, and thereby have more accessibility to, the activities of the university will be facilitated by extending the university's use of the media, by developing offices of alumni relations at the campuses and within the central administration, and by encouraging college councils and alumni chapters to bridge the gap between the campuses and the local communities.

Regents Position: APPROVED

2. Campuses will be encouraged to increase the accessibility of their facilities and other resources to the general public when they are not being fully utilized by registered students.

Regents Position: APPROVED

APPROVED WITH CONDITION

I. *The Students*

1. The university projects enrollment at the State-operated campuses to grow at a rate of approximately 7,500 full-time equivalents per year, from 145,700 FTE's in 1972-73 to 205,700 FTE's in 1980-81.

Regents Position: APPROVED WITH CONDITION

The Regents approve undergraduate enrollment goals as indicated below, together with such part-time enrollment as may be accommodated within the State University budget through 1975. At the graduate level, the Regents defer action on any projected increases in full-time graduate students pending receipt of the report of the Commission on Doctoral Education.

| <i>Year</i> | <i>Full-Time Undergraduate Enrollment</i> |
|-------------|---|
| 1973 | 117,325 |
| 1974 | 120,850 |
| 1975 | 123,725 |

Consistent with the recommendations on page 84, the Regents defer action on enrollment goals for all sectors, including the State University between the years 1976-77 to 1980-81.

2. The university projects the following distributions of the full-time equivalent enrollments projected for 1980-81:

| | <i>Graduate</i> | <i>Undergraduate</i> |
|-----------------------------|-----------------|----------------------|
| University Centers | 30% | 70% |
| University Colleges | 10% | 90% |
| All State-operated Campuses | 18% | 82% |

Regents Position: APPROVED WITH CONDITION

The Regents approve in principle the increased emphasis of the university centers in graduate work and approve the overall profiles of graduate and undergraduate students as proposed for the university centers, university colleges, and State-operated campuses. They express caution, however, that this distribution may not be attainable in the light of the Fleischmann Commission recommendation for the deemphasis of teacher education and the imbalance in doctoral education. The Regents defer action on expansion of full-time doctoral enrollments at State University pending receipt of the report of doctoral education.

II. *Academic Programs*

A. The First 2 Years

1. The agricultural and technical colleges will be renamed technical colleges to reflect their broad and changing mission. They will continue to offer education in agriculture, which will be one of many specialized programs falling within their emphasis on applied sciences.

Regents Position: APPROVED WITH CONDITION

Approval of this recommendation is in principle only. Specific amendment to the master plan will be required to either rename or alter the nature of the agricultural and technical colleges. The Regents anticipate that priority will be given to their recommendations concerning the role of agricultural and technical colleges. (See p. 19 of this document.)

2. High-cost, low-enrollment programs in the 2-year colleges will be reviewed, and appropriate recommendations for the phasing out or consolidation of such programs will be made where such action is justified educationally and fiscally.

Regents Position: APPROVED WITH CONDITION

Each such action should be presented as an amendment to the master plan. Programs should not be eliminated on the basis of cost alone.

B. Baccalaureate Studies

1. New and expanded programs in the arts will be developed in areas such as arts administration, criticism, and emerging art forms at both the graduate and undergraduate levels at

appropriate campuses, taking advantage of existing campus and community resources.

Regents Position: APPROVED WITH CONDITION

Specific approval must be obtained for each such program through amendment to the master plan.

2. The time-shortened baccalaureate program will be established as the basic degree program for one or more of the State University's undergraduate colleges.

Regents Position: APPROVED WITH CONDITION

Specific approval must be obtained for each such program through amendment to the master plan.

3. A "classical college within the college" will be developed on the campus of one or more of the existing senior colleges. This "new" collegiate program (with a traditional design) will have a clearly defined 4-year curriculum which focuses on sharply defined content objectives. It will provide an alternate option in contrast to the open elective trend and may be extended to all senior campuses in the future.

Regents Position: APPROVED WITH CONDITION

Specific amendment to the master plan will be required for the establishment of each such program.

4. High-cost, low-enrollment programs at the senior campuses will be reviewed, and procedures will be developed for the phasing out or consolidation of such programs where such action is justified both educationally and financially.

Regents Position: APPROVED WITH CONDITION

Each such action should be presented as an amendment to the master plan. Programs should not be eliminated on the basis of cost alone.

C. Graduate Studies

1. Lifelong-learning graduate opportunities will be developed to accommodate the need of many persons for continued study after graduation in order to keep abreast of new developments in their fields.

Regents Position: APPROVED WITH CONDITION

Specific master plan amendment submission required.

2. Procedures will be developed for the periodic review of existing programs, providing for the elimination or consolida-

tion of such programs when justified educationally and financially.

Regents Position: APPROVED WITH CONDITION

Specific approval must be obtained for each such program through amendment to the master plan.

D. International Studies

1. An extensive programmatic and financial review of offerings in international studies will be made universitywide. Based on these reviews, some programs will be eliminated, others will be combined, and still others will be developed, as justified educationally and financially.

Regents Position: APPROVED WITH CONDITION

Specific approval must be obtained for each such program through amendment to the master plan.

II. Location of Learning

1. Experience gained through travel may be considered a part of the collegiate program of the student, provided the activities have been carefully planned, the experience is related to a clear educational objective, and methods of evaluation are rigorously applied.

Regents Position: APPROVED WITH CONDITION

Such a policy, however desirable, must be registered with the State Education Department for its validity. Specific proposals for particular programs must be presented.

2. Special universitywide, offcampus study centers are proposed which will accommodate students from any campus of the university wishing to focus on a special problem of study. The following offcampus study centers are identified as possibilities:
 - a. *An Urban Study Center* in New York City which permits students to examine for a period of time the problems of the city as well as to benefit from the rich cultural resources found in the urban areas.
 - b. *A Center for Federal Government Studies*, to be located in Washington, D.C., which will be available to students wishing to study national and international affairs and processes of government. Such a center will build upon the Washington semester program already developed within the university.

- c. *A Center for State Government Studies* in Albany which is available for students interested in studying government and decision making at the State level.
- d. *A Center for Rural and Migrant Studies*, available for students who are interested in aspects of rural life in America, agricultural problems, and the special issues relating to migrant workers and migrant worker education. Such a center could build upon the activities of the Center for Migrant Studies, located at Geneseo.
- e. *A Center for Environmental and Ecological Studies*. This program for offcampus study will focus on problems of the environment, taking advantage of the great natural resources in the State University. The center will draw upon the physical and the faculty resources now found at a number of institutions throughout the State University of New York. These resources will be brought together in a special way to provide for a planned program of offcampus study.

Regents Position: APPROVED WITH CONDITION

The Regents appreciate the advance notice of possible future amendments to the university's master plan. They will welcome specific proposals for review when they are ready for consideration.

III. Facilities

A. The Emerging Colleges

1. State University College at Herkimer-Rome-Utica will develop as an upper-division and first-year graduate college focusing especially on local and regional needs in technological and applied studies. The new campus will be considered a regional educational center, drawing upon the resources of other established campuses within region 2, demonstrating an arrangement by which an institution can draw upon a network of learning resources in an area to serve a special educational objective.

Regents Position: APPROVED WITH CONDITION

The Regents reaffirm their approval of Herkimer-Rome-Utica as an upper-division college. They will require more specific information about what is meant by the rest of the recommendation. To that end, they request that the State University provide a special report of progress made, including an accounting of 1973 expenditures by 1 September 1973.

2. State University College at Old Westbury will provide on-campus study for students emphasizing especially the educational pattern needed to serve a broad range of educational and social backgrounds. In addition, Old Westbury will participate in a "campus-in-dispersion" program which will provide a network of study centers to serve the population of Long Island, focusing especially on the transfer student from the regional community colleges.

Regents Position: APPROVED WITH CONDITION

The Regents favor locating learning centers conveniently for the users. However, each "study center" to be established by Old Westbury must be approved for program and exact geographic location through amendment to the master plan.

B. Specialized Colleges

1. The Maritime College will develop new programs related to water environments and transportation to augment and build upon the present program.

Regents Position: APPROVED WITH CONDITION

Specific amendment to the master plan will be required for each such program.

2. The New York State College of Ceramics at Alfred University will alter or augment its undergraduate and graduate programs to reflect new changes in industry and technology.

Regents Position: APPROVED WITH CONDITION

Specific amendment to the master plan will be required for each such program.

C. Location of Learning

1. The establishment of a "nonresident" program will be considered by each campus of the university. Such a program of study will identify offcampus study arrangements, and students will be encouraged to pursue at least part of their collegiate study through such arrangements.

Regents Position: APPROVED WITH CONDITION

Specific amendment to the master plan will be required for each such program.

IV. *The Quality of Campus Life, Including Student Affairs*

1. A limited number of residence halls will be made available to retirees on a selected number of university campuses.

Regents Position: APPROVED WITH CONDITION

Specific amendment to the master plan will be required for each such program.

V. *The Professional Staff*

1. Adjunct professors will be recruited for specialized programs where unique skills or experience are needed. Such faculty will be selected using criteria which differ, as necessary, from traditional requirements of formal advanced training and research.

Regents Position: **APPROVED WITH CONDITION**

When such personnel have been appointed, they should not be discriminated against in salary increases or promotional opportunities.

VI. *Interinstitutional Cooperation*

A. Collaboration With Other Institutions

1. The university will assist actively in the carrying out of interinstitutional operations once planning has been completed. Such projects may be appropriately funded through the budget of the State University of New York.

Regents Position: **APPROVED WITH CONDITION**

It is premature to suggest funding arrangements.

VII. *Research*

A. Scholarship and Research

1. Additional universitywide research centers will be established, especially in the humanities, the social sciences, and in the field of educational theory and practice. Specific consideration will be given to the establishment of the following:

- a universitywide center for the study of aging
- a universitywide center for urban studies
- a universitywide center for society and the arts
- a universitywide center on teaching and learning, with special emphasis on the teaching of the culturally different and the educationally disadvantaged, particularly at community colleges

A universitywide center for public policy studies which would examine major public policy problems in the State and its communities and also sponsor institutes and forums which would bring together public and private leadership in the State with university personnel to pursue contemporary problems and long-term policy and directions.

Regents Position: **APPROVED WITH CONDITION**

Consideration and planning is approved. Such establishment will require specific amendment to the master plan.

VIII. Resources for Learning

A. Educational Technology

1. State University's Educational Resource Library will serve as a center for instructional materials. The library will develop correspondence courses for independent study and a library of audio cassette tapes to be used for instruction by campus and nonresidential students. This function should be developed and coordinated with the Empire State College.

Regents Position: APPROVED WITH CONDITION

Such developments must be coordinated with the 3R's Systems.

DEFERRED

I. The Academic Program

A. The First 2 Years

1. Local areas which currently meet university criteria for establishing and maintaining a community college (Albany, Saratoga, Chemung, Cattaraugus Counties) will be encouraged to provide opportunities for community college study, either independently or jointly with adjoining jurisdictions.
2. Community colleges in heavily populated sponsorship areas or in areas with dispersed populations (Nassau, Suffolk, Oneida, Erie, Niagara, Monroe, Onondaga, Westchester, Franklin, Essex Counties) will be encouraged and assisted to continue the development of multicampus operations.

Regents Position: DEFERRED

The Regents urge the university to continue its studies in these areas and to present specific proposals as appropriate.

B. Baccalaureate Studies

1. Recognizing the increasingly critical place of communication in today's world, new programs in communications fields, including journalism, will be encouraged.

Regents Position: DEFERRED

While the Regents realize the importance of journalism education, they defer action on this recommendation pending a specific program proposal submission for their review.

C. Graduate Studies

1. Plans will be drawn for the development of universitywide

doctoral programs in selected fields which will draw upon the resources of faculty and facilities across the entire system.

Regents Position: DEFERRED

The Regents support the State University's efforts to slowly and deliberately develop centers of doctoral excellence at the university centers while taking into full account the doctoral programs existing in nonpublic institutions. The Regents, therefore, defer action on this recommendation pending the submission of specific program proposals for review. The Regents will review these program proposals in light of the findings of the current Regents Doctoral Commission.

II. Facilities

1. Space utilization standards will be revised so that campuses will be used at 118 percent of originally projected capacity.
2. Size of program in student (FTE) capacity

| | State- Operated Campuses | Community College Campuses | All Campuses |
|--|--------------------------------|----------------------------------|-----------------|
| <i>Total Capacity in FTE</i> | | | |
| Required by 1980-81 | 205,700 | 211,000 | 416,700 |
| <i>Less: capacity of existing facilities, those under construction, and those for which funding is committed</i> | | | 331,434 |
| <i>Difference: FTE capacity of 1972-80 development program</i> | | | 85,266 |

Regents Position: DEFERRED

The Regents defer action on the facilities goals of the university pending submission of more specific information concerning the 1972-80 period.

DISAPPROVED

I. The Academic Program

A. Baccalaureate Studies

1. Baccalaureate programs in technical and applied studies will be developed at a college center in each regional area for transfer students. These centers will draw on both the public

and private colleges in the region as well as on community and regionally based business and industry.

Regents Position: DISAPPROVED

The Regents recognize the need for creating transfer opportunities for A.A.S. program graduates, but they also realize that there is an unused capacity in private 4-year technical institutions in the State.

Unit 2: The State University's Responses to the Regents Priority Concerns

Economics and Financing of Higher Education

State University expresses its support for 2 years of universal post-secondary education and commits itself to maintaining a minimum cost to the student for those 2 years. The university recognizes that throughout this decade the student will continue to share in the cost of his education, but expresses its confidence that the State will accept the primary responsibility for support of higher education at the various levels.

In order to assure that the projected rate of enrollment growth will be financially feasible, the university has examined the 1972 5-year revenue forecasts of the State government, extended those forecasts through 1980, and projected the consequences if the university were to continue to receive the 1972-73 percentage of State tax revenues throughout the period. Results of this comparison, together with coming productivity improvements through managerial and innovative programs, indicate that the plan is financially feasible.

The university will apply more stringent priorities to its capital development plans, will achieve optimum utilization of space, and will reduce unit costs of instruction and/or increase student credit-hour productivity.

The university will coordinate its administrative and fiscal structure among the community colleges and the senior campuses, and will seek, through legislation, amendment of the community college law and revision of administrative regulations for this purpose.

Financial Aid to Students

The university will continue efforts to provide undergraduate and graduate aid programs, utilizing the same guidelines for both community and State-operated colleges, to help defray the cost of higher education for economically disadvantaged youths and adults.

These programs will assure that middle- and low-income students will not be relatively penalized. Provision is promised for aid to needy students enrolled in certain programs which involve costs supplemental to the cost of instruction.

Higher Education as a Lifelong Opportunity

The university no longer recognizes higher education as occurring within a concentrated period, but recognizes the need for higher education to proceed, in an informal as well as formal manner, through the precareer periods, the living-working periods, and the retirement periods of life. The university will develop formalized but flexible means whereby its capabilities can be used throughout an individual's lifetime. Within and among its existing campuses and programs, the university will establish programs which extend opportunity to secondary school students capable of rapid achievement. The university will provide undergraduate and graduate opportunities for continued study, retraining, and cultural enrichment of post-high school working adults. The university will also establish cooperative arrangements with groups and agencies serving retired persons.

A deferred admissions program will be established assuring college placement, and also encouraging students to engage in work experience and/or travel before they enter higher education. Intermittent periods of leave will be provided to allow for work, travel, independent study, and planned leaves of absence from formal study for appropriate supplementary education without arbitrary penalty or disadvantage to the student upon readmission. Community colleges, especially, will be encouraged to develop transitional programs under which the student leaves college before completing his program and pursues both work experience and further learning through an apprenticeship. The campuses will further develop offerings especially adapted for adults and will make them more accessible to students of all ages; included will be mini-courses, released-time instruction, short-term workshops, and other specially designed offerings. High priority will be placed on continuing education for health care personnel, both on campus and by means of television and independent study. Continuing education programs will thus be made an integral part of the academic programs of the health sciences centers to help maintain high quality services. The university will conduct experimental long-term programs whereby a graduate enters into a commitment or "contract" for continued learning, with special counseling and planning by faculty.

Humanistic Values in a Changing Society

Open Admissions—The clientele of the State University is identified as every high school graduate of the State who applies although the provision of vocational and college preparatory activities for nongraduates is mentioned. The educational opportunity centers (proposed to be formed by merging the present urban centers and cooperative college centers) and the community colleges, with high priority placed on guidance and counseling, are those units of the State University with the greatest responsibility for implementing open admissions.

Admission to the senior campuses will be based on four criteria: academic ability, special arts talent, service needs of a region, and the campus commitment to extend educational opportunity. Each senior campus will develop a plan based on the four criteria, and will prepare annually a profile of students, admitted and rejected, for use by students and high school counselors.

The university accepts the responsibility of assisting or preparing or training students who are not prepared "culturally, socially, academically, or financially" for college study. Special attention is directed by the university to securing faculty with interests and skills appropriate to the needs of students from culturally different or educationally different backgrounds.

Especially emphasized are (1) the need for research and experimentation in developing means of assessing academic ability which are more valid and reliable than the present test scores and secondary school records, (2) the proposed development of a multiple-choice, preferential application process to best match the student to the college, and (3) the planned establishment of "locator centers" to guide applicants to appropriate public or private institutions. State University proposes an educational opportunity center for each region to provide counseling, testing, readiness preparation, and placement assistance.

Although the agricultural and technical colleges will continue to emphasize technical and applied learning, they will offer access to liberal arts education for those students who cannot find a course of study within commuting distance of their homes.

Curriculum Relevancy—To move the student beyond the conventional class-study environment, to amplify knowledge acquired through a lecture-discussion, and to expand traditional print-based

resources, the university promises an increase in the modes, methods, and means of instruction.

Consideration will be given to a uniform calendar, within which campuses would be encouraged to develop flexible smaller units of study to meet the needs of subject content and student scheduling.

Greater use of the cultural resources of the large cities, including New York and Washington, is proposed by means of study centers, varied living-learning designs on the campuses, increased provision for independent study and research activity on all levels, further development of the "contract" learning principle, and the recruitment of adjunct faculty for specialized programs where experience or unique skills are required. In the 2-year colleges, especially, flexibility in scheduling and content will be emphasized, with special attention to the needs of working adults.

In addition to an urban study center and a center for Federal Government studies, the university proposes a center for urban and migrant studies and another for environmental and ecological studies.

Selected programs on various levels in areas of need and interest will be developed based on special campus strengths to avoid duplication and program competition. Examples of these programs are technical and applied studies, arts administration and criticism, communication and journalism.

Great emphasis is placed by the university on continuing review of curriculums by all units on all levels, in order to insure that each program continues "to reflect the current knowledge and changing demands" appropriate to its discipline and maintains flexibility and variety appropriate to its diverse student clientele. Continued development of multidisciplinary and interdisciplinary programs is promised, but with care to see that the programs correspond to the needs of society, and, on the graduate level, that they do not prejudice the existing department structure. A commitment is expressed to optimal flexibility in requirements for admission to, and completion of, graduate programs. The central staff will review high cost-low enrollment programs and provide for phasing out or consolidation as appropriate. Campuses concerned with graduate education will identify new fields of study occasioned by developing knowledge and emerging social concerns.

A strong commitment is made to a stringent programmatic and financial assessment of international programs on all campuses to insure realistic and sharply defined goals, proper balance (e.g., be-

tween Western and non-Western studies), more representative groups of visiting students and professors, and the broadest possible opportunities for university students to participate in foreign-study programs. Cooperative funding through public and private agencies, as well as university support, will be sought for study abroad programs.

New institutional patterns are being proposed within the university: upper-division and first-year graduate technical offerings at Herkimer-Rome-Utica; the "campus-centered college in dispersion" at Old Westbury; the education of performing artists in a liberal arts context at Purchase. New and unique institutions will be supplemented by regional cooperation and articulation arrangements and by the learning centers of Empire State College in each of the four coordinating areas.

Finally, in order to meet the needs of the intellectually and artistically gifted student, each senior campus will be urged to consider the creation of an honors college. At least one undergraduate college with a clearly defined 4-year arts and science curriculum—an alternative to the open elective trend—will be established, and the number of distinguished teaching professorships within the university will be expanded.

Teacher Education—The absolutely essential role of good teaching in the schools is reexamined by the university, as is its commitment to the recruitment and careful selection of excellent candidates for teaching. State University will prepare teachers who are not content to accept schools as they are, but who will plan for, and facilitate responsible change. Curriculums, and especially the practicum experience, will be reexamined in cooperation with the educational community. Early and continuous counseling will be provided for those possessing a desire to enter teaching. Student interests and societal needs will be increasingly balanced by encouraging preparation for teaching the educationally handicapped and the culturally diverse.

The university will enable and encourage teachers in the field to renew or improve their professional competence with new and innovative post-baccalaureate offerings including seminars, institutes, and class visitations, which are increasingly seen as part of the professional assignments of teachers. For graduate students, especially doctoral candidates, planning a career in college teaching, collegiate internship programs will be established.

A more sharply defined policy toward regular evaluation and a more proportionate sharing in the financial support of campus schools by the local school district is announced, and the rationale for the existence of the campus school is stated: to operate "special programs or experimental or innovative activities, essential to teacher education, which cannot be conducted in the public schools."

The 2-year colleges, particularly, will be encouraged to develop appropriate training programs for paraprofessional school personnel.

Vertical and Lateral Mobility in the Educational Continuum

The State University's responses to this priority concern center on two main points of emphasis: (1) greater coordination between the university and the high schools for students capable of rapid advancement to college level work and (2) the function of the community colleges as entry points to higher education; i.e., preparing many of their students for transfer to senior institutions, and guaranteeing transfer to a senior college within the community region. The senior colleges will be required to make regular reports of their transfer admissions policies.

Additional specific responses are provision for deferred admission, for interrupted or intermittent higher educational programs, and for serious exploration and establishment of the time-shortened baccalaureate degrees on a limited basis. Through increased coordination of master's and doctoral programs, master's degree work done at one university campus will be fully acceptable for an appropriate doctoral program at a university center.

All campuses will be urged to reexamine systems for evaluating learning experience off-campus for degree credit.

The colleges of arts and science will continue to work toward the State University goal of a 40 percent lower division, 60 percent upper division ratio.

The Governance of Higher Education

While expressing the necessity of broad participation of the university community in governance, the State University clearly states that primary responsibility for governance rests with the board of trustees; that university policy, and the resultant program coordination and administrative tasks, are the responsibility of the central staff under the chancellor; and that the chancellor and the campus presidents have responsibility for direction of operations in their re-

spective spheres, but that well-organized mechanisms exist for consultation by the chancellor and the presidents with their major constituencies. The role of the campus councils in the structure of university governance is to be clarified.

The university will establish representative advisory bodies, including a council of presidents serving as an advisory cabinet to the chancellor, a faculty council of community colleges, a student delegate body, and a delegate body representing alumni; these bodies will be consulted by the university with reference to matters in which they have concern. Greater efforts will be made toward easy communication between the campuses and the central administration. The distinction between governance and the process of collective bargaining will continue to be observed.

Efforts will be made to increase understanding among groups of students on the campuses, between students and the local communities, among age groups, and among faculty and students. The university will look favorably on establishment of an office of ombudsman by campuses. An evaluation of the climate for learning will be conducted on each of the campuses utilizing the attitudes and opinions of faculty, staff, and students.

The university encourages voluntary associations of groups within the university for educational purposes to the extent that they are consistent with its policies. However, the university will in no case permit exclusion from membership, participation, or access to facilities based on race or ethnic origin or religion.

Campus rules and regulations will be understood to apply to students' conduct only in their capacities as students.

In regard to faculty, the university commits itself to review, with full faculty participation, the existing tenure system to explore the use of measures for assessing faculty productivity, to reevaluate critically its recruitment and candidate selection processes, and to insure full equality of opportunity in terms of hiring, promotion, and compensation.

It is proposed that nonteaching professionals be provided with opportunities for increased professional development, improved job security, and continuous evaluation. The vital role of nonprofessional personnel is to be stressed, and each campus will be encouraged to involve them more fully in its overall program. An "equal opportunity" program for all employees of the university is proposed with special emphasis on educational and training opportunity.

Development of Complementary Institutional Relationships

Regionalism within the State University, based on four major coordinating areas and subregions as appropriate, will have a three-fold purpose: (1) more efficient and effective use of resources; (2) improved admissions and mobility patterns; and (3) improved public service to the communities and the regions. The university will explore affiliate relationships with other higher education institutions for resource sharing toward common purposes in such areas as library services, computer facilities, faculty, and other specialized talent.

The State University indicates its active participation in regionalism for both planning and operations based on guidelines prepared by the Board of Regents. It will seek consistency between its own plans and those of the private sector and of The City University of New York. The university emphasizes its conviction that regionalism should be unstructured, emerging as many working relationships under the encouragement of the central staff.

The central staff will bring artists and scholars together to serve clusters of colleges in a region. The university center libraries will become depositories for colleges within their coordinating areas. Coordination of graduate efforts among university campuses will be encouraged, involving movement of faculty and students among campuses, and the proposed development of universitywide doctoral programs. Medical colleges will make the highest use of surrounding health care and academic facilities and capabilities. The university will encourage and facilitate the direct involvement of its personnel and students in business, government, and social service. This will be done by providing training and, where appropriate, by supplementing its faculty with outside professionals.

The concept of the one-plus-one format for 2-year colleges—1 year of liberal arts, followed by 1 year of specialized study at another college in health care, engineering, public service, journalism, etc.—will be developed.

Delivery Systems for the Teaching/Learning Process

The External Degree—The university indicates the opportunities for off-campus study will be offered both through the learning centers of Empire State College and on established campuses; that efforts will be made to establish some external degree activity through a "nonresident" program in relation to each campus. Intern-

ships, social service assignments, and properly planned travel related to a clear educational objective, all rigorously evaluated, will be eligible for degree credit.

Nonresidential master's programs in selected fields will be developed on a pilot basis. They will be subjected to ongoing assessment for student progress and achievement.

Technological Aids and Devices—The State University's response to this area of concern is mainly in the application of computer technology and educational television. The university reports that consolidations of computer installations have been achieved; that statewide and regional centers are serving academic research, instruction, and libraries; that the ability to interface with a national network is being built into its systems.

The New York Network, in addition to serving as the technical coordinating unit for all educational television in the State, is to be the instructional center in this medium for both campus and off-campus students of State University.

The expanding use of computers is forecast at dispersed off-campus training centers as well as at resident campuses. For this reason, the university strongly urges the State of New York to establish a more modern, comprehensive statewide communication network.

The Role of the Library—The State University reaffirms its commitment to excellence in library development. All of the university's libraries will be encouraged to develop cooperative services with other libraries. The regional approach involving cooperation with both private and public institutions will be used not only to reduce needless duplication, but also to increase the variety of titles available in an area, while maintaining at each campus, the library resources necessary for its own program. Empire State College students will have access to all of the university's libraries. The university center libraries will be central depositories for all campuses within their coordinating areas, especially in specialized or high-cost areas.

In the future, applications for approval for development of new programs are to include provision for library resources. Moreover, formulas for funding of the university's libraries will allow for extramural users as well as regional and statewide program usage.

The university sets fall 1974 as the operational date for two library computer centers to serve all academic libraries in the State, with provision for shared cataloging, interlibrary loans, and union

catalog book listings. Coordination with regional networks is planned; tie-in with a future national network is possible.

Through its Educational Resource Library, the university will make available among campuses televised tapes, independent study materials, and computer assisted programs.

The Role of Research

The State University will seek excellence in scholarship and research, but will increasingly recognize excellence in teaching, especially on the undergraduate level. This balanced approach to the role of research is articulated (1) by the recognition that distinguished and pioneering research requires special commitment and abilities and (2) by the statement that some faculty will be committed exclusively to research. A system of distinguished research professorships is proposed for independent advanced research and artistic endeavors. Advanced and specialized research capability will continue to be emphasized on the senior campuses.

University research centers, oriented toward long-range social concerns—aging, urban problems, educational theory and method, society and the arts, public policy—will draw upon resources throughout the university system and will represent a network of research activities focusing on the special problems identified.

In response to this priority concern, the university reaffirms that its advanced and specialized research will focus on two roles of research: advancement of learning in a particular discipline, and applied interdisciplinary research in areas of social importance.

Research in the teaching-learning process will be supported by allocations of money to each of the community colleges. On all levels, faculty will be encouraged to develop the students' opportunities for independent study and research; on the undergraduate level this will mean supervised research and encouragement of skills related to discovery, classification, and extension of human knowledge.

The possibility of developing a New York State interinstitutional university press is to be explored, to involve merging the State University's publication program with one or more public or private universities.

Manpower Shortages and Surpluses

The university mentions specifically the responsibility for service to society through the meeting of manpower needs in reference to

the 2-year colleges which prepare a large proportion of their students directly for the occupations; the arts and science colleges with properly articulated preprofessional and professional programs; the medical colleges; and the specialized colleges. The university emphasizes, however, that all such programs, on all levels, for whatever occupation or profession, shall be continually subjected to intensive review to insure that in quantitative and qualitative terms the programs remain appropriate to the changing needs of society. Upper division collegiate centers in technical, applied science, and highly specialized programs will be created. The university will intensify its career counseling in the light of the findings of manpower studies.

State University will avoid, however, the advancement or withdrawal of major program investments in response to fluctuations in manpower needs, and will reserve such shifts until they have been justified by major and sustained trends.

The health sciences, and meeting the critical health care needs of the State and Nation, represent a special area of concern to the State University. Of chief importance for the planning period will be closer integration among the health sciences centers of the university and health related programs at other campuses within and outside the university. They will jointly assume new roles tailored to the changing health care needs of society and responsive to technological change as well as to increased humanistic awareness.

These will include training new health practitioners of all types, implementation of model programs such as those for team care, expansion of the career ladder concept, shared educational experiences in health care fields other than their own for familiarization, and the design of new managerial and analytical programs toward control of spiraling medical costs. At the same time, the university will maintain its critical basic and clinical research programs, increasingly assume responsibility for clinical experience at the residency level, and continue its efforts to shorten periods of training while improving quality and competence.

The specialized colleges—agriculture, human ecology, industrial and labor relations, veterinary medicine, forestry, maritime, ceramics—will continually reexamine their missions in regard to the needs of the times, while respecting the purposes for which they were established.

Special Community Services for Higher Education Institutions

The State University commits itself to seek improved community relations by increasing public accessibility to its resources and facilities and by encouraging greater faculty and student participation in areas of community concern.

In making available essential services to students, the university will seek to make arrangements within the community. Only when needed services are not available, or when their use would result in an excessive burden on the community, will the university provide such services directly. The university will seek to separate itself from the manager-tenant relationship, insofar as possible.

The university's libraries, in a manner consistent with its priorities, will be made increasingly available to the public. The university will bring the scholarly and creative activity of its faculty to public benefit through publication and through the various media, including those of commercial firms, taking due care that "public resources are not expended for private benefit."

New models of health care delivery will be designed to better meet health care needs of the communities located near each of the university's health sciences centers.

Most important, however, the State University will seek to bring to bear the expertise of its professional staff upon the public policy problems of the State and its localities, undertaking major advanced-study projects where possible and appropriate.

Regents Position

The Regents position on the response of the State University of New York is more in the nature of comment rather than formal judgment, as in the case of the recommendations. The positive and constructive approach evidenced in the response to the 11 priority concerns is indeed gratifying. The Regents are generally in agreement with the concepts enunciated and are especially pleased at the action-oriented nature of the proposed plans to meet the problems and issues raised in the discussion of the priority concerns.

An example of compatible concepts is found in the finance area, for the Regents concur that although the State has the primary responsibility for the support of higher education, the student, based on his ability to pay, should assume an equitable share of the cost. The plans for increased accountability enumerated for this area illustrate the "how to" portion of the response.

The Regents are encouraged by plans for deferred admissions programs—intermittent periods of work, travel, and independent

study that will provide additional access points to all age groups, eliminate the lock step, and provide individually tailored programs.

This, coupled with the plans to improve the relevancy of all programs and the establishment of honors curriculums, should insure the diversity and quality of the university's program offerings.

One apparent gap in the university's response is in the area of vertical and lateral mobility. The plans put forth for increasing the vertical mobility are encouraged by the Regents, but little attention is given to the need for increased lateral mobility to enable students whose career goals change to adapt with the minimum dislocation and loss of credit.

The straightforward affirmation of the role of the trustees and the powers and responsibilities of the chancellor and the presidents is admirable and exemplifies the responsible character of the responses. A further illustration is the stated policy of the university in relation to manpower needs.

"State University will avoid, however, the advancement or withdrawal of major program investments in response to fluctuations in manpower needs, and will reserve such shifts until they have been justified by major and sustained trends."

The Regents wish to remind the State University that all library development must take place within the framework and requirements of the 3R's Systems.

Since other aspects of the university's response to the Regents priority concerns have been treated elsewhere in the statewide plan, they are not repeated here.

The Regents look forward to working with the university in providing substance to these plans and await with interest the rate of implementation to be contained in the 1974 progress report.

Section 2: The Review and Analysis of The City University's Master Plan

The Regents share with the members of the Board of Higher Education the priority educational objectives the latter articulate for The City University of New York.

The Regents support The City University in its open admissions program in which it has undertaken an educational mission critical to the future of the city and to the future of the city's young people. The Regents fully expect that The City University of New York will devote, as it has stated, this next quadrennium to further improving its open admissions programs. This effort will require that the university do more than it has been able to do to increase the retention of open admissions students. The Regents urge greater articulation between the colleges and secondary schools of New York City in de-

veloping an educational continuum by which students may attain their potential as rapidly as their abilities and motivations allow.

The Regents applaud the board of higher education's recognition of the university's responsibility for improvement of its teacher preparation programs. As the direct beneficiary of the city school system's efforts, the university has the primary responsibility for assuring that city school teachers are adequately educated through field-centered and competency-based programs. This priority is identified as one of the highest of The City University for this next quadrennium; the Regents believe the high priority assigned to this area is clearly warranted.

The Regents wish to draw attention to the proposals the university has made to provide new educational options for students, to extend programs for the training of health personnel and the establishment of a comprehensive system of curriculum evaluation, to the university's increased commitments to urban research and urban oriented programs, and to its special commitment to the adult population of the city.

The Regents general response to certain issues identified in The City University's master plan is as follows:

Enrollment Projections for the Next Decade

In its master plan, The City University proposes three sets of enrollment projections, each of which is based upon different assumptions. The first set (projection A—low) assumes a continuation of present trends. A second set (projection B—intermediate) assumes that the retention rate of newly eligible students will gradually improve, that the high school graduating class will increase slightly, and that the university will be able to develop programs which will increase adult attendance on a full-time basis. The third set (projection C—high) is optimistic in the sense that the projections assume factors that will maximize enrollment growth.

The board of higher education has approved the enrollment projections associated with the second set of assumptions, quite properly establishing enrollment goals that are consistent with university goals for improving retention rates among open admission students. The Regents, however, must assume the continuation of present trends until there is evidence to the contrary; hence, the Regents approve enrollment goals for The City University based on the first set of assumptions (projection A—low) which is based upon

stable high school graduating classes in New York City and retention rates for newly eligible City University students based upon the most recent experience. While approving the enrollment goals in projection series A, the Regents recognize that they will need to approve revised goals should the board of higher education prove correct in its assumption of an improved retention rate for newly eligible students, increased numbers of adults seeking full-time day session status, and increases in the number of high school graduates.

Facilities Needs

The Regents again draw attention to the obvious fact that The City University is in critical need of increased facilities in order to provide a minimal level of service to its students. Without attempting to attach blame for the slow pace of construction in the city, the Regents again urge the university and the city administration to expedite the university's construction programs. Recent State legislation supported by the Regents permits financing of the 2-year colleges through the City University Construction Fund and provides for board control over the City University Construction Fund's governance. These new arrangements place squarely on the university the full responsibility for facilitating construction of the university's campuses.

There is still one major constraint on the university's construction program which limits the university's ability to meet its long-term construction needs. The debt service on the university's construction financed through the Dormitory Authority is related to the level of fees and tuition. It appears that present tuition schedules adjusted somewhat in future years should be adequate to finance a \$400 million construction program for the 2-year colleges and an additional \$520 million in construction at the 4-year colleges. The Regents approve shortrun construction goals at about these levels.

Using as a parameter of construction needs the standard of 100 net assignable square feet per student, the university is likely to require still heavier expenditures in future years. The Regents, however, do not believe that the present level of fees and tuition will support a construction program adequate to meet the long-term needs of City University students.

Financing the University's Operating Budget

The Regents support the board of higher education in its efforts to stabilize higher education costs at The City University. The Re-

gents note with approval the university's efforts at more effective management and its efforts to better use the abilities of the instructional staff of The City University. Even so, the financial needs of the university during these next 5 years are enormous, and future financing of the university's programs are likely to be jeopardized by the City of New York's difficult financial situation. The Regents once again call for increased State financing of the university's operating budget, while at the same time calling upon the board of higher education to establish a rational tuition policy for all students based upon their ability to pay.

With these cautions by the Regents to the university, this section represents the Regents review and analysis of the master plan of The City University of New York.

Unit 1: The Consideration of the Recommendations of The City University's Master Plan

There were five recommendations submitted by The City University for Regents response. The Regents have approved three of the recommendations, have approved one with condition, and have disapproved one. Careful note should be made that without specific approval being expressed by the Regents, no approval is implied or intended for any of the material submitted by The City University.

The City University of New York recommends, and the Regents respond as follows:

APPROVED

1. The following enrollment goals for the SEEK program of The City University be approved:

SEEK Enrollments (Headcount), Actual 1967-71 and Projected 1972-75

| | <i>Actual</i> |
|-----------|---------------|
| fall 1967 | 1,416 |
| 1968 | 2,732 |
| 1969 | 4,159 |
| 1970 | 6,255 |
| 1971 | 7,262 |

| | | |
|--|------------------|--------|
| | <i>Projected</i> | |
| Fall 1972 | | 8,700 |
| 1973 | | 9,800 |
| 1974 | | 10,700 |
| 1975 | | 11,400 |
| Four-Year In- crease (1971 to 1975) | | 4,138 |
| Planned First-Time Freshman Enrollment for SEEK (Fall and Spring Semesters) | | |

| | |
|---------|-------|
| 1973-74 | 3,000 |
| 1974-75 | 3,100 |
| 1975-76 | 3,200 |

Regents Position: APPROVED

The Regents approve the enrollment goals for SEEK and the combination of the administration of the SEEK and College Discovery Programs.

2. The Board of Regents move to implement the aforementioned space standard and assist the university in holding down costs by approving as expeditiously as possible the individual campus facility plans of the senior and community colleges as these are submitted by the university.

Regents Position: APPROVED

The Regents have always expedited The City University master plan amendments and will continue to do so as rapidly as the plans are made available for Regents review.

3. The university be authorized promptly to proceed with the purchase of the University Heights Campus of New York University for use by Bronx Community College.

Regents Position: APPROVED

The Regents support the acquisition of the University Heights Campus of New York University as a permanent site for the Bronx Community College.

APPROVED WITH CONDITION

The Board of Regents approve in principle the construction and rehabilitation of facilities based on the space standard of 100 net assignable square feet per full-time equivalent student approved by the Regents Regional Advisory Council on March 17, 1972, as "an absolute minimum for fulfillment of space needs at The City University."

Regents Position: APPROVED WITH CONDITION

The Regents approve in principle the 100 net assignable square feet per full-time equivalent student standard, subject to the financing constraints outlined on page 119 of this document.

**APPROVAL OF ENROLLMENT GOAL A:
DISAPPROVAL OF ENROLLMENT GOALS B AND C**

The City University requests that the following enrollment goals for its Open Admissions and other programs be approved:

**Projected University Enrollment Growth (Headcount)
by Major Group 1971-75**

| | Actual Fall 1971 | Projected Fall 1975 | Percent Increase Over 1971 |
|--------------------------------------|---------------------|------------------------|----------------------------------|
| <i>Undergraduate</i> ¹ | | | |
| Day Session Matrics | 120,452 | 171,000 ⁴ | 42 |
| Eve. Session Matrics | 18,374 | 27,000 | 47 |
| Nonmatrics | 41,163 | 30,000 | (27) |
| Subtotal Undergraduate | 179,989 | 228,000 | 27 |
| <i>Graduate</i> | | | |
| Master's | 25,787 | 28,000 | 9 |
| Doctoral | 2,353 | 2,900 | 23 |
| Mount Sinai School of Medicine | 178 | 348 | 96 |
| Subtotal Graduate | 28,318 | 31,248 | 10 |
| Other ² | 10,451 | 15,000 | 44 |
| University Total ³ | 218,758 | 274,248 | 25 |

¹ Includes SEEK, College Discovery, and special admissions.

² Includes noncredit, adult education, and urban centers.

³ Excludes campus schools (Hunter primary and secondary).

⁴ Projection B (Intermediate). In view of the uncertainties as to (a) the size of the high school graduating classes, (b) attrition rates under open admissions, and (c) the extent of adult admissions, the university has made three projections of enrollment of day session matriculants for fall 1975, as shown below, of which intermediate projection B appears at the present time to be the level most likely to be attained:

| | <u>Fall 1975</u> |
|-----------------------------|------------------|
| Projection A (Low) | 161,000 |
| Projection B (Intermediate) | 171,000 |
| Projection C (High) | 179,000 |

Regents Position: DISAPPROVED

The Regents disapprove the enrollment goals submitted by The City University (plan B), and support instead the plan A projection levels developed in The City University's master plan. As stated on page 80, this disapproval may be notified by an improvement in the retention power of the university.

Unit 2: The City University's Responses to the Regents Priority Concerns

Economics and Financing of Higher Education

"The future financial needs of the University are significant, and improvements in city and state funding are required to meet the University's needs over this decade."

The Board of Higher Education (New York City) approved the recommendation of the Citizens Commission on the Future of The City University of New York (Wagner Commission) which proposed that the State progressively increase its percentage contribution to the operating costs of The City University by 5 percent annually, until it provides 75 percent of the budget. This recommendation was made for both the senior and the community colleges of the university. The additional cost to the State would be \$18.6 million the first year (1973-74) and \$195.8 million in fiscal year 1979-80; the State funding level of \$532.2 million in fiscal year 1979-80 would be an increase of 191 percent over the State's 1972-73 funding share.

The City University of New York presents possible solutions to the problem areas in the university's budgeting process, including the following:

1. "Authorization each December for the University to recruit the necessary faculty for the enrollment increase estimated for the following fall."
2. "Establishment of adequate per student funding formulas which properly reflect the academic needs of the types of students and which do not force the University to absorb up to one-half of its enrollment increase with no funding as has been the case in the first years of open admissions."
3. "Provide the University with a multiyear operating budget which appropriately reflects collective bargaining contracts, increased enrollments, a responsible level of internal economy measures, facilities requirements, debt service for construction, and other necessary obligations."
4. "Establish a January 1st beginning for City University's

fiscal year so that the University has at least 6 months to plan after the city adopts its budget in the prior June."

5. "Enforcement by the City and State of the December 1st certification date as specified by the State Education Law."

The City University has undertaken a program to curb spending, including the following measures:

1. The size of administrative offices has been limited to levels lower than staffing standards established 4 years ago;
2. Spending for employee overtime has been drastically reduced;
3. Many courses with small enrollments have been eliminated;
4. Equipment purchases have been curtailed; and
5. Experimental development of computer-assisted instruction (CAI) and other learning devices is proceeding; this would permit educational economies in the future.

The City University presents a senior college facilities construction program costing \$1,023 million (in January 1971 dollars) to accommodate the planned 1975 enrollment.

The \$400 million legislative limitation for the NYC-BHE community colleges construction program "should permit substantial facility development during the next several years."

Financial Aid to Students

"The fact that City University's undergraduates increasingly come from families with relatively low income serves to reemphasize the importance of maintaining free tuition as well as of obtaining additional student aid for living, books, and fee expenses for a growing number of needy students."

The City University projects a decline in evening session non-matriculants, since many will become matriculated students due to liberalized post-open admissions matriculation standards. There will be a resulting loss of tuition and fees income, and an increasing need for student aid.

The university points out that attrition rates are not solely a reflection of academic difficulties; many students are forced to leave college for financial reasons. Over 9 percent of all City University students are either on welfare or members of families "caught in a tragic conflict between attending college and immediately earning a livelihood." Even without tuition, the cost of attending City Univer-

sity is high—averaging over \$700 per year for books, fees, transportation, lunch, and so on, in addition to foregone income. The City University cites decreasing average family incomes of its undergraduates as evidence of the importance of maintaining a free tuition policy, as well as of the need to obtain additional student aid for economically disadvantaged students.

Higher Education as a Lifelong Opportunity

As one of its own major educational priorities, the university states the obligation to broaden its commitment to the adult population of the city. This commitment extends to paraprofessionals who desire to upgrade themselves, to those who require retraining, to older adults, to working people who are free only evenings and weekends, to those desiring academic credit on the basis of experience or testing, and to professionals who require advanced degree work.

The essence of a large city is constant change, and the university states its recognition of the trend toward more frequent career changes resulting from rapid technological advances. The community college structure is seen as the most appropriate vehicle for meeting this responsibility to the people of New York.

Humanistic Values in a Changing Society

Open Admissions—Not surprisingly, in view of its tradition of service to the children of the middle and lower classes of New York City, this response of The City University is its most extensive. Inaugurated 5 years before the originally planned date of 1975, open admissions—not only as an admissions policy, but also as an educational program—is designated by the university as its foremost priority of the 1970's. "The Open Admissions policy cannot and will not be reversed."

The opening of its high quality colleges to all New York City high school graduates includes admission of many who clearly do not have adequate precollege preparation. To avoid the "revolving door," the university will continue and extend its commitment to innovative and comprehensive programs of remediation, tutoring, counseling, and financial assistance.

Open admissions has vastly expanded opportunity to attend college. In 1969, the freshman class numbered 20,000; in 1970—the first year of open admissions—there were 36,000 freshmen; and in 1971, 39,000. On the other hand, open admissions students had a

significantly higher attrition rate—35.8 percent, as compared to 19.9 percent for previously eligible students. The university has studies underway to better understand and reduce this high rate.

The university's experience with open admissions has varied, college by college. The rethinking of teaching and learning processes is identified as a major consequence on all campuses, however. While admitting some great difficulties—in faculty attitudes, testing and placement, and motivational approach—the university affirms that a high degree of commitment to the goals of open admissions exists throughout the system.

Curriculum Relevancy—While working toward making open admissions a success, the university continues to meet the needs of students well prepared for undergraduate study. Advanced placement, challenging new options, and greater flexibility and initiative in the planning of college careers are increasingly provided. Positive steps toward breaking the “lockstep” have been taken. Some are study abroad, interdisciplinary majors and programs, work-study programs, and reduction of the number of required courses.

An increasingly diverse student body makes such progress toward “relevancy” most important; furthermore, with 19 semiautonomous large institutions located quite close together, City University is in an excellent position to engage in experimentation.

The university proposes to establish a center for curricular development in compensatory materials. Its functions will include collection and evaluation of materials, holding of inservice seminars for compensatory instructors, development of new curricular materials, and development of diagnostic tests.

Finally, the university designates its health care programs as those most continually in need of rethinking and updating; it plans to take an active role to better coordinate and enhance the quality of health professions training.

Teacher Education—As another priority, the university plans to restructure its teacher education programs in order to better train teachers in meeting the educational needs of today's elementary and secondary school children in New York City. The program is to become field-centered with emphasis on evaluating student-teachers' competence in live classroom settings.

The university will develop special graduate programs, possibly at the doctoral level, to train supervisory personnel for the elementary and secondary schools. Other programs will be developed for

specialists in high school remediation; emphasis will be on educational technologies.

Paraprofessional serving as teacher's aides are now a significant part of the city's school system. Through the Educational Associate Program in the community colleges, under contract with the board of education, the university is helping thousands of aides to become full-fledged teachers. Typically these aides are members of minority groups who are mature and responsible, and who have a strong desire to advance. The entire concept of paraprofessional education is to be broadened by the university.

Vertical and Lateral Mobility in the Educational Continuum

It is significant that one of the July 1969 Guidelines for Open Admissions provided for "student mobility between various programs and units of the University." In terms of vertical mobility, since 1970, the vast majority of students have been granted their first choice of college. (In fall 1972, 76 percent of first-time freshmen will receive their first choice.)

High school graduates of New York City going on to higher education increased from 58 percent in 1969 to 76 percent in 1970, comparing favorably with the current national average of 55-60 percent.

Further, the university is giving serious consideration to special college programs for high school juniors and seniors who could earn credits "in escrow" until their matriculation. Also being considered are "middle schools" in one or more colleges, combining the last 2 years of high school with the first 2 years of college.

The Governance of Higher Education

The City University plans expansion of an ongoing effort to improve the management of the university, including planning, program, and performance evaluation; information systems; budgeting; and all forms of administration. Great emphasis is placed on the growing need for administrative computer support to effect improved management of resources in relation to objectives. Significant projects in this area, already inaugurated at several City University campuses, will be expanded to other colleges on a coordinated basis.

City University also plans to remain a confederation of semiautonomous colleges under the policy direction of the board of higher education and administrative coordination of the chancellor's office.

Development of Complementary Institutional Relationships

The City University states, as one of its major principles for planning, that it will continue to join other colleges and universities in cooperative arrangements.

In many fields, qualified faculty are in short supply, needed clinical or field affiliations are often difficult to obtain, and programs with low enrollments are expensive. The university proposes, wherever these or similar problems exist, to consider regional cooperation with colleges within and outside of City University and with other public and private agencies. The New York City Regional Advisory Council, under the Board of Regents, is seen to be a promising effort in this direction.

The university participates in exchange programs. Some important ones are the Goddard program at Staten Island Community College, the highly important relationship between the graduate center and the New York Public Library, and released-time work-study programs with employers of all types.

Delivery Systems for the Teaching/Learning Process

The External Degree—The CUNY B.A., one of the pioneering ventures in this area of the Regents concern, is mentioned as one of the many means by which The City University meets the varied needs of its diverse clientele in a city where demands for the utmost in innovation and flexibility are commonplace.

Technological Aids and Devices—A serious commitment to the development and use of educational technologies is evidenced by expansions of The City University Mutual Benefit Instructional Network (CUMBIN) closed circuit television network, computer assisted instruction, computerized data analysis, model building, problem solving, and simulation.

The establishment of a computer facility with the range and capability needed by a modern university is planned, financial resources permitting, to provide minimally adequate hardware and personnel resources to serve essential instructional, administrative, and research needs of The City University.

Planning is underway to harness new technical developments for expanding the power and versatility of CUMBIN; joint efforts with other city institutions are under consideration.

The Role of the Library—Sweeping educational changes in recent years have placed additional burdens on City University's li-

braries, as they have on similar libraries across the country. Campus libraries will continue to expand their collections, at the same time that moves are made toward greater interlibrary cooperation, both within the university and with other institutions of the city and State. Consideration is being given to the development in some CUNY colleges, perhaps on a boroughwide basis, of specialized collections in greater depth than would be possible if all libraries developed parallel collections.

A major direction of the university's development for the 1970's is that libraries be more closely coordinated with individual instructors and academic program needs. This is important for open admissions and for the development of many new programs, including interdisciplinary programs, at the colleges. The university's libraries are to become increasingly integrated into the total learning environment.

"In return for existing and desired services it is the University's stated purpose to expand its assistance to the New York Public Library which could take alternative forms, such as obtaining special funding through City University's operating budget; provision for a limited number of professional and support staff to help in the research collections; assuming direct University responsibility for selected research of all collections; or through obtaining federal funding." The City University regards the New York Public Library as an indispensable resource of enormous depth and incalculable value, upon which the Graduate Center at 42d Street depends.

The Role of Research

The university maintains a firm and growing commitment to research, considering it essential to the maintenance of vitality as a center of knowledge and learning. Faculty will continue to be encouraged to undertake funded research.

For the 1970's, The City University's most prominent commitment is to urban research, basic and applied. A recently established Office of Urban Policy Research will mobilize resources for urban problem solving. Part of the Graduate Center, this office administers the urban analysis center funded by the City of New York. The center functions in such areas as fiscal problems, public administration, and criminal justice.

Development of a strong computer capability will enable the university to support a broad range of urban research programs and

to train students in vitally needed skills. The university refers to the massive data analyses requirements inherent in the work of the various city agencies, for both research and planning, to which the university also has a commitment.

Evaluative research into the effectiveness of academic programs will be an important field for the 1970's—for open admissions and for many other programs whose impacts on the life of the city may be measurable.

Manpower Shortages and Surpluses

A part of the original 1962 statement of mission of The City University said: "To prepare qualified persons for professional careers in those fields appropriate for a university, and in which the need is well established. . . ." This mission is being carried out through educational programs for a wide range of occupations and the personal needs of students—which in a deeper sense are those of the city, State, and Nation.

An active concern is expressed for the academic soundness and relevance to the needs of current technology in the community college technology programs. Further, the university intends to place greater emphasis on the development of marketable skills within liberal arts curriculums in the colleges. Large numbers of CUNY graduates enter the job market directly from college; electives in specialized courses, minor areas of concentration, and work-study experiences could be of great value to many liberal arts students.

As mentioned above, The City University plans expansion of its computer capabilities. An additional reason for this is the constant demand of government and commercial facilities in the city for computer programmers, systems analysts, and technicians. This is a demand the university will continue to meet.

The largest single source of health personnel in the city is the university. The 1968 master plan identified a shortage of trained manpower at virtually all professional and semiprofessional levels, and set in motion the development of a comprehensive system of programs spanning the full spectrum of careers allied to the health professions. A small sampling of the university's list of programs includes medical emergency technology, prepharmacy, community health education, medical computer science, and psychiatric nursing.

The university recognizes, however, that the 1970's and 1980's will bring ever-increasing sophistication to the delivery of health care. Constant reevaluation of curriculums will be conducted to en-

able and encourage students to adjust to change, to update their educations, and to move from one type of health career to another. To counteract a present trend toward premature overspecialization, a series of broadly based core curriculums—especially in the community colleges—will be developed. Their successful completion will allow the student to make an appropriate choice of a specialization area.

Special Community Services for Higher Education Institutions

The City University of New York is not only a major agency of the city, but also a part of the social, cultural, and economic fabric of the city. Its urban orientation carries with it the strongest possible commitment to further New York City's development, not only as a marketplace and workshop, but as a home and center of cultural and intellectual energy.

The university expresses its intent to continue and expand this commitment through programs and research, through contractual and cooperative relationships with the public schools, and through services directly provided to other city agencies and to other public and private agencies.

Regents Position

The Regents note that most of City University's responses to the priority concerns are, in toto, in general support of the Regents concerns. In some cases, however, the individual response is either inadequate or contrary to Regents policy. An example of the former is the area of economics and financing, where spending economies initiated by the university are listed but no realistic financial proposal is presented.

The Regents are pleased that the report of The Citizens Commission on the Future of The City University of New York has been completed. They look forward to reviewing proposals after the Board of Higher Education has had time to formulate suggested amendments to its master plan.

In the financial aid to students area, the university opts for the maintenance of free tuition, a policy that runs counter to the Regents view that the student, based upon his ability to pay, should assume an equitable portion of the cost of his education.

On the positive side, the Regents commend the university on the development of a variety of programs to meet the post-secondary educational needs of the increasingly diverse population of New York City. Especially encouraging is the broadening of the commitment to the adult population of the city and the attention given to programs designed to adequately prepare entering students for educational experience, so as to reduce attrition.

The Regents view the development of regional relationships as a positive means of enriching educational offerings, and note with pleasure The City University's apparent commitment to the development of complementary relationships. The keen awareness of the university's role in the total development of New York City is underscored by its intent to expand its well-established relationships with various agencies both through program offerings and research. The Regents encourage this increasing commitment and compliment the university on it.

Section 3: The Review and Analysis of the Master Plan of the Private Colleges and Universities

The Commission on Independent Colleges and Universities developed and submitted to the Regents a master plan on behalf of the private colleges and universities of the State. This is the first time that a comprehensive master plan has been developed by the private sector of higher education. Not only do the Regents compliment the commission for having taken the leadership in coordinating the master plans of private colleges, but they also compliment the private colleges and universities for having developed long-range plans to guide their own growth and development. For many colleges, this has been their first total plan, a plan which addresses itself to issues such as governance, admissions criteria and procedures, enrollments at all levels, academic programs, faculty and other educational workers, facilities (including libraries), finance, research, and community services. The institutional plans received by the Regents from private colleges and the collated plan from the Commission on Independent Colleges and Universities have facilitated the Regents endeavors to develop a comprehensive long-range plan to guide educational development at the college level in the State for the seventies.

The Regents emphasize two concerns with respect to the master plans submitted by the nonpublic institutions.

Enrollment Projections

A summation of the projections made by the private colleges for the decade ahead suggests that they look forward to a significant growth in enrollments. Enrollment patterns through these past 3 years suggest a continuing decline in demand for enrollments at nonpublic institutions, given the present difference in tuition between public and nonpublic institutions. Without new student financing ar-

rangements, the Regents believe private colleges will be unable to achieve their modest enrollment goals. While advising nonpublic institutions to move with caution in basing their financial plans upon these submitted enrollment goals, the Regents do affirm their support of new financing arrangements to permit full utilization of the educational resources available at nonpublic institutions.

Facilities Requirements

In their master plan, the Regents identify signs of significant underutilization of classroom facilities at nonpublic institutions. They are deeply concerned with the heavy emphasis on fundraising for construction that has characterized fundraising efforts in the nonpublic sector. They are concerned, also, with the proposals for facilities expansion submitted by nonpublic institutions in their individual master plans. The private sector projects an increase in nonresidential facilities of 17 percent for the 1972-76 period, while projecting an increase of full-time enrollment of 9 percent. The Regents urge nonpublic institutions to reexamine their construction plans and ask that such institutions defer newly planned construction *unless it is absolutely essential*. They urge continuing constraint in approval of new construction programs, especially in light of the enormous potential for better utilization of existing facilities. The Regents believe that under the best arrangements, nonpublic institutions will be under major financial pressure during the remainder of this century. High debt service and heavy maintenance burdens make nonpublic institutions susceptible to financial crises when even small enrollment declines are experienced.

Unit 1: The Consideration of the Recommendations of the Private Colleges and Universities

There were six recommendations submitted by the Commission on Independent Colleges and Universities, on behalf of its 106 member institutions, for the 1972-76 period. Of the six recommendations, five were approved and one was deferred.

The commission recommends and the Regents approve:¹³³

1. that the State's Scholar Incentive Program be rapidly ex-

¹³³ The Association of Colleges and Universities of the State of New York (ACUSNY), in recognition of the plight of private colleges and universities, passed resolutions (September 1972) in support of some of the private sector's master plan recommendation. See appendix P, p. 439.

- panded to make collegiate choice between public and private institutions less decisively centered upon family economic circumstances
2. that the private 2-year colleges be admitted to full partnership status in the State's effort to expand its network of community-junior colleges by inclusion in the eligibility tables of the Bundy program
 3. that New York State's system of direct institutional aid (the Bundy Plan) be reaffirmed and its schedule of grants to private institutions funded, at the very least, at levels sufficiently high to reflect the erosion the program has suffered, through inflation, the past 4 years
 4. that the Regents Scholarship Program be continued as one of the principle vehicles for encouraging excellence and aspiration among our young women and men
 5. that the Regents create a second scholarship program specifically reserved for successful community and junior college graduates who wish to transfer to a 4-year institution to complete a baccalaureate program.

The commission recommends and the Regents defer approval: that the principle of "categorical aid" be reaffirmed, and that the State's private college and university programs in engineering be added to those in the health sciences field as eligible for such aid.

Regents Position

The Regents defer action on this recommendation pending evaluation of the priority of categorical aid in relationship to the remaining five recommendations which are broadly applicable to all private institutions.

Unit 2: The Responses Made by the Private Colleges and Universities to the Regents Priority Concerns

The responses of the private institutions to each of the priority areas were summarized, discussed, and submitted as an addendum to the plan. This was performed according to the State Education Department's classification of the private institutions into the following categories: multiversity, university, college complex, college, engineering and technical school, specialized college, health center, semi-

nary and religious training college, 2-year college general, and 2-year college specialized.¹³⁴

Economics and Financing of Higher Education

Most institutions agree that this should be number one of the Regents priority concerns. Financial situations of the institutions are, with some exceptions, described as serious or desperate. One multi-versity states flatly that without new and massive funding it will not survive the decade. At least a dozen colleges state, or imply, that their survival will depend on new funding.

Institutions are taking some internal actions: raising tuitions (although the limitations on this are explained carefully), deferring certain maintenance and expansion projects, freezing all salaries and departmental operating budgets in several cases, conducting college-wide cost reduction campaigns, and developing sophisticated accounting and cost benefit analysis systems. Some of these are in co-operation with the State Education Department's Office of Management Services.

The conclusion of the private sector was that private higher education must be regarded as a single resource along with public higher education. Also, aid—whether paid to students or to institutions directly—should be commensurate with the contributions of the private sector to society. This is considered essential for the survival of private higher education. Some of the responses suggest that ultimate consequences of the lack of such aid would be the necessary expansion of the public sector at great cost and a system of higher education badly out of balance and vulnerable to excessive control.

Although a number of institutions specifically mention that fiscal long-range planning has been in existence for some years, there seems little doubt that the Regents request, through the commission, for planning information has had a beneficial and stimulating effect.

Financial Aid to Students

According to their responses, the private sector has been generous in its aid to students, and in many cases this is felt to be the core of their financial problem. Many institutions cite figures to indicate their commitments to student aid: 13.4 percent of all unrestricted funds to student aid (a multiversity); over \$2 million per year from its own sources (an urban university); 10 percent of its

¹³⁴ See appendix H, p. 322.

total budget (an upstate polytechnic institute); 45 percent of all students receiving aid and 20 percent of all aid going to the disadvantaged (a north country university); average aid, to the 45 percent of its students who receive it, \$1,700 (a midstate college).

Interestingly enough, only two institutions deplore the high non-payment rate of student loans, and the expectation of many students that aid is their right. One of the most frequent suggestions is for some form of "voucher system" which would make the student a free agent in a competitive public-private market. Another is expansion of the Scholar Incentive Program to "some meaningful level," with greater consideration for the middle-class student. One response recommends a three-way system: one-third paid by the student, one-third by the State, one-third in the form of loan money to be repaid.

Regardless of the type of institution, consensus exists that from now on qualified students will have to be turned away because of their financial status and that it is clearly up to the State to fulfill its commitments to the ideal that "no student should be denied access at the institution of his choice due to inability to pay."

Higher Education as a Lifelong Opportunity

The universities tend to operate well-established divisions of continuing education, schools of liberal and applied studies, or the equivalent. In some instances, branch campuses offer continuing education and adult education. Special counseling for those who have been away from formal study, flexible admissions policies, and special scheduling for the convenience of working people are standard features of private institutions. The various professional schools: business, education, engineering, and medicine provide their own specialized continuing education. One urban university operates an "Early Parolee" program in cooperation with the Department of Correction. The college of engineering at one multiversity is designing instruction for industry, using technological media.

College complexes, in addition to operating schools of general studies, evening programs, and divisions of adult education, respond in various ways to their unique surroundings. A large urban college has an executive master of business administration program. Another offers courses for low-income people in areas such as consumer education and urban psychology. Several institutions invite alumni to return for special sessions or regular course work, often at low cost;

several invite senior citizens to audit courses free of charge. An institution consisting of two consolidated colleges is considering forming a third college designed to offer lifetime educational opportunity for both former students and neighbors. About a third of the responses mention early admission of selected high school juniors. Short-term workshops and seminars are used to a wide extent in this area of priority concern. In several cases, planning for such activities had been stimulated by the Regents 1971 priority concerns statement.

The colleges, somewhat smaller, tend to see themselves as learning resources within the community and as part of the community. Numerous instances of planning for summer schools and adult education programs are reported. Close contact with community groups and responsiveness to the needs and interests of especially the mature student are characteristic. In several instances, off-campus courses in neighboring communities are in operation or are planned.

Colleges of engineering are mainly concerned with updating the education of engineers and scientists, and with service to nearby industry. An upstate urban institute of technology enrolls about 11,000 in evening, extension, and summer classes, many for only one course.

Several of the 2-year colleges concentrate on special types of students: the rural disadvantaged, those with learning problems, people aspiring to reach the first rung of the occupational ladder, etc. Specialized 2-year colleges attract full-time older students, and find it possible to grant considerable credit based on competence acquired through experience.

Humanistic Values in a Changing Society

Open Admissions—It cannot be emphasized too strongly that, in a very real sense, the private sector feels that it is practicing open admissions in its true spirit, and that it was in fact committed to open admissions well before it became public policy. (The response of the private sector to priority concern Number 2: Financial Aid to Students should be read in this context.) If open admissions is defined as making educational opportunity available to as many as possible of those who may reasonably be expected to be able to profit from it—and this, due to economic limitations alone, must be the definition of the private sector—then the response to this concern of the Regents has been rich and vigorous.

The private institutions endorse the spirit of open admissions.

With very few exceptions, however, the policy of admitting every applicant with a high school diploma or the equivalent is seen as appropriate to the public sector, and nearly impossible for the private sector. The reasons most often given are the need to concentrate rather than disperse limited resources, the extremely high cost of the required support services, philosophical opposition to the idea of a liberal education for everybody, and, in several cases, unsuccessful experiences involving very high attrition rates.

Responses of the various classifications of institution do not vary appreciably. They do not constitute a repudiation of the concept of access to education for all, however. Except for the graduate or specialized schools, which of necessity base admissions standards on set criteria of measurable competence, the private colleges and universities report activities in the spirit of open access. These include very high amounts of aid to disadvantaged students—in one upstate college, 30 percent; operation of H.E.O.P. (Higher Education Opportunity Program); flexible admissions policies in cases where academic potential seems to exist; and the regular seeking out of a number of talented disadvantaged students.

One large urban university calls attention to its Martin Luther King program, which antedates open admissions at City University by 2 years. Two New York City institutions express willingness to help The City University absorb some of its open admissions students on a contract basis.

An interesting variation is a program of "open admissions" for veterans.

Curriculum Relevancy—Most to the point in this response are the schools of engineering, one of which points out that not to be relevant is "certain death" for such an institution. The 2-year colleges tend to base their responses on the fact that most of their graduates will be going directly into the work force and that their curriculums are relevant by definition. Cornell University cites its land-grant traditions and its extremely flexible graduate program requirements for the individual student and his adviser. A downstate university reports the only degree-granting program for physician's assistants in the State.

Many colleges list samplings of programs—in ecology, in urban sociology, in criminal justice, for example. The New School for Social Research reveals that Alvin Toffler's "Future Shock" began as a course there. Student participation on curriculum committees, curric-

ulum revisions, and ongoing reviews are reported by virtually all of the schools which respond to this item. But a few say that the liberal arts are relevant in themselves, and that it is part of the role of freshman counseling to make this clear.

Four-one-four calendars and winter terms are seen as important opportunities for innovative programs, experimental projects, and offcampus activities.

Teacher Education—Responses from those institutions which train teachers (approximately 50 percent of the total responding institutions) do emphasize competency-based training and field-centered experiences. The need to produce thinking, humanistic educators who can adapt to a rapidly changing society and profession is emphasized. The specialized colleges of education report extensively on their humanistic approach to teacher education. One multiversity carries its commitment to subject matter competency to such an extent that its separate school of education was dissolved several years ago. Most of the colleges which train teachers report less drastic manifestations of the same idea: that academic proficiency is most important and that teacher education is far more than preparation for licensing.

Close relationships with school districts are also characteristic of these reporting institutions. Field experience is required for each of 4 years or the equivalent, and close supervision is made of major concentration work as well as classroom-related work. A joint teacher placement program within a north country consortium is reported as is a four-way relationship of a Rochester area college, a State University 4-year college, the University of Pittsburgh, and the Rochester schools.

A number of urban colleges are training teachers specifically for ghetto schools. The use of encounter group sessions to improve skills in interrelations is reported.

While some uneasiness over the apparent surplus of teachers is evident, the consensus of the institutions is that there is no surplus of quality teachers, and that specifically trained teachers, or those with advanced training, will remain in demand.

Vertical and Lateral Mobility in the Educational Continuum

Universities reporting cite involvement in University Without Walls, advanced placement, credit by examination for nontraditionally acquired skills, deferred entrance plans, flexible entry and reen-

try arrangements, and liberal transfer requirements between its colleges.

Responses of the larger colleges (college complexes) add accelerated admission of selected high school students, easier changes of major, student exchange programs, more flexible degree completion requirements, and an increased tendency toward allowing full credit for 2-year college transfers. Cross-registration arrangements increasingly exist, especially within consortia. A student can now more easily shorten the time needed to earn the baccalaureate degree or to commence graduate level work.

Among colleges, formal transfer arrangements with nearby 2-year colleges are not unusual, although such transfers—at least from the public community colleges—are likely to require considerable financial aid. Half of the engineering schools reporting indicate good academic success with 2-year engineering science transfers.

The 2-year colleges reporting emphasize transferability to 4-year colleges and easy change of area of study in the freshman year when many students are uncertain of their plans.

At the very least, considerable serious thought is being given, in most of the private institutions, to responding to this priority concern.

The Governance of Higher Education

The responses to this priority concern exhibit a strong tendency toward broad-based representation and participation, including that of students, in all processes of governance. Some of the private institutions have opted, usually after a period of study, for a senate or council, to which the board of trustees listens carefully. Represented on this are faculty, administrators, and students; if this is not the case, some arrangement having the same effect has been worked out. At the other extreme are those colleges, many church-related, which hold to the traditional dominant role of the board of trustees and president. Scattered in the middle are those institutions reporting a "collegial-hierarchical" arrangement, or a solid sense of academic community, or a very small campus where everybody knows everybody else and communication is no problem.

Approximately 5 percent of the reporting institutions include information on the progress of unionization and collective bargaining or their avoidance of them so far. Such developments are seen as opposed to the concept of the community approach to governance.

Development of Complementary Relationships

Few reporting institutions make no reference to cooperative arrangements with other colleges. Approximately 50 percent mention affiliation with a specific consortium. Several mention that they had been instrumental in its formation. About 10 percent refer to a commitment to the Regents plan for a regional approach to cooperation; one north country institution registers opposition to it, although not to interinstitutional relationships.

The various arrangements are for varied purposes. Some have been in operation quite naturally: Hamilton and Kirkland, Barnard and Teachers College at Columbia, Hobart and William Smith, Syracuse and College of Forestry. Many others are for specific purposes: psychological studies of visual perception, delivery of urban health care, recruitment of 2-year college transfers, and operation of television facilities.

A clear trend toward cooperation for resource sharing and program strengthening is visible from the responses.

Delivery Systems for the Teaching/Learning Process

The External Degree—The independent colleges and the universities support much further exploration regarding the external degree. Their view is that this is one of a great many approaches to higher education which may be appropriate for some people. They are confident that even without the creation of further mechanisms and institutions, ample opportunity already exists for those motivated toward nontraditional, offcampus degree level study.

The broad range of responses includes a statement of philosophical commitment to campus education, an expression of doubt that the concept would be practical given acceptable standards, and an indication of intent to cooperate with Empire State College or with University Without Walls. Between the latter two positions are reports of activities such as independent study, credit by examination, and work-study programs, which are considered supportive of the external degree idea. The New School for Social Research describes its liberal studies program as a "half-way" house toward the external degree. Syracuse points out that its liberal studies degree was one of the first three in the Nation in 1966.

One response indicates that the external degree might be seen as a regional concern of higher education, and that in any case it should be conferred by a central body, such as the Regents.

Technological Aids and Devices—As could be expected, the most detailed responses to this priority area came from the schools of engineering. Polytechnic Institute of Brooklyn has developed programmed learning kits, some of them now available commercially. At Rochester Institute of Technology, technology is seen not as merely aids and devices, but as a systematic way of designing instruction. The universities tend to have established instructional resources centers, departments of communication, or library learning centers. New York University mentions "Sunrise Semester," its award-winning television program begun in 1957; Rochester reports talk-back television for engineering courses serving industry.

Among the colleges, the application of computer facilities to instruction is becoming almost routine, and, of course, every institution has an audiovisual center. Ithaca reports one of the strongest, best planned systems of technologically-based instruction.

To a great extent the uses of technology for instruction must be seen as a regional, or interinstitutional, concern of higher education. Attention is directed to the section of this plan on the specific subject of interinstitutional cooperation.

The Role of the Library—A number of trends are visible in the responses to this item: increased regard for the library as the center of the academic process, expansion of library facilities where finances permit, membership in interlibrary loan associations, jointly shared libraries, interinstitutional purchasing and cataloging, integration of audiovisual media with libraries into "learning centers," and increasing use of microfilm and microfiche for economy and ease of storage and retrieval.

New York City institutions make extensive use of the New York Public Library. But the response of a capital district college may speak for the entire private sector when it says: "Interlibrary loans, or large collections available on a cooperative basis are fine for the scholar who knows what he's looking for. But for the undergraduate who has to fumble around, nothing replaces a strong, accessible college library."

The Role of Research

Responses to this priority concern are divided into two groups: those of the universities, the schools of engineering, and the specialized colleges of education which regard research as essential to the life of the institution and its role in society as well as to the scholar

and teacher; and those of the colleges, which see research as subordinate to and supportive of good teaching. They feel research is to be encouraged, but by no means should become the faculty members' chief preoccupation.

Some interesting responses are offered as examples: New York University notes that its school of engineering had recently made a breakthrough in the methods of urban waste disposal. Cornell sees research as fundamental to its role as the State's land-grant college and comments on the historical impact of university research on present national economic power. Clarkson indicates that it could easily take on government-sponsored research toward solution of socioenvironmental problems. The Bank Street School notes its commitment to "clarify, deepen and revise its theoretical-philosophical-operational framework for teacher education."

Approximately 25 percent of the colleges report that provisions for sabbaticals, leaves, or reduced teaching load for faculty research exist.

Manpower Shortages and Surpluses

Most of the reporting institutions mention some form of counseling for career guidance, usually in connection with surpluses of trained personnel existing at the present time. But a school of engineering criticizes excessive publicity and refers to signs of impending shortages. Another engineering school reports that since its faculty were active in science and industry, they tend to be sharply attuned to emerging trends, to the benefit of the institution. A multiversity observes that, historically, most manpower projections have turned out to be wrong. A western urban university observes that serious thought is turning toward revision of Ph.D. curriculums, toward emphases other than the traditional research and teaching. One highly respected college complex reports it is advising only its best qualified students to enter Ph.D. programs.

Approximately 25 percent of the colleges make reference to commitment to liberal education, which will serve the graduate well in any shift of the manpower market. Another 25 percent indicate in one way or another that some allowance—curtailment of enrollment in certain programs or establishment of new programs—is taking place in light of apparent manpower demand changes.

Perhaps the most directly affected are the 2-year colleges, many of whose graduates will have the appropriateness of their educations

tested shortly after college entrance. Relatively few changes are reported, however, and one such college comments on the extent to which today's students are aware of the needs of society.

Special Community Services for Higher Education Institutions

Services of many kinds are mentioned: adult and continuing education programs, tutorial efforts of students, consultant services, facilities sharing with local organizations, provision of a nonpartisan forum for public issues, cooperation with local school systems, cultural events, and so on. Individual participation of faculty and students in community affairs is mentioned repeatedly. For faculty, this is valuable as public service; for students, this can be a valuable learning experience.

Some specific services stand out: St. Lawrence's cooperation with the local State hospital in the training of nurses; the operation by Pace of centers for office skills, financial studies, and data processing education; and Dowling's establishment of a center for suburban studies. The Academy of Aeronautics sees its service mission as being to the aviation community; Polytechnic Institute of Brooklyn drafted the revised building code for New York City.

Perhaps most succinct is Adelphi's statement that the service role of a university is advice and technical assistance, research in public problems, training and upgrading of community personnel—public and private.

Regents Positions

The Regents are gratified by the broad scope of the aggregate response of the private institutions to the 11 priority concerns, and by the positive and constructive nature of these responses. This spirit is evident throughout; beginning with internal actions, such as cost-reduction campaigns and cost-benefit analyses, which underscore the concern for increased accountability, and continuing to the statement that the community service role of a university is “. . . advice and technical assistance, research in public problems, [and] training and upgrading of community personnel, public and private.”

The Regents are also impressed with the realistic attitude of the private institution responses to their priority concerns.

While the Regents encourage the concept of open admissions and note that it has been implemented in a sense by the generous programs of financial aid, they recognize that a large scale, across-the-board approach to open admissions is more appropriately a responsibility of the public sector. Thus, the Regents encourage the private colleges and universities to develop their unique strengths rather than dispersing their limited resources.

The Regents find it refreshing to see some of the private institutions calling for an objective view of the relevancy of the liberal arts, in and of themselves, and proposing the need for clarifying this concept with students rather than abandoning them for the sake of change. The Regents also commend the private institutions for the concern expressed and the programs proposed to insure the relevancy of all offerings to the increasingly heterogenous student body, in terms of age, academic preparation, and socioeconomic background.

The Regents are indeed pleased to learn that the more active participation in the planning process has had the beneficial and stimulating effect noted. In this respect, they look forward to increased evidences of this process in the 1974 progress report of the private colleges and universities.

Part II: The Review and Analysis of Noncollegiate Post-Secondary Education Master Plans

Previous statewide plans, as their titles indicate, called for the "expansion and development of higher education." In keeping with changes made last year in the planning law, this 1972 statewide plan focuses on the development of education beyond high school. The new perspective implied by the altered title is significant for comprehensive planning. Developing post-secondary education in New York State requires the effective coordination and utilization of all existing resources and fosters a much broader concept of education.

Thus, for the first time, the Regents quadrennial plan includes descriptions of programs and resources, as well as recommendations, for noncollegiate post-secondary education. The Regents hope that those institutions responsible for conducting noncollegiate programs will submit master plans in the future. This effort becomes necessary if the statewide plan is to reflect all viable alternatives and present a truly comprehensive planning document.

During 1972, the Regents authorized 21 proprietary schools to award degrees in certain specific programs. Since this activity will continue on a program-by-program basis, and since many proprietary institutions are among the oldest resources for post-secondary education in the State, it is important to incorporate a sampling of their perspective at this time. Therefore, the Regents commend three proprietary schools for voluntarily submitting master plans. The inclusion of a review and analysis of these statements in the 1972 Regents statewide plan signifies only a beginning. Subsequent plans will increasingly require, and benefit from, inputs provided by additional proprietary institutions and other noncollegiate post-secondary educational resources, such as private occupational and correspondence schools, apprenticeship training programs, and the many occupational and continuing education programs for adults which exist in the State.

Proprietary Schools

The three proprietary schools providing master plans to the Regents for this statewide plan are Albany Business College, Albany; Bryant and Stratton Business Institute, Buffalo; and (Sadie Brown's) Collegiate Institute, New York City. Each of these post-secondary institutions is accredited as a 2-year school of business by the Accrediting Commission for Business Schools, Washington, D.C. Furthermore, each has been authorized by the Regents to grant the associate in occupational studies (A.O.S.) degree in certain programs. Although many other institutions are operating in New York State, these three schools have provided statements which together afford considerable insight into the problems and issues facing all proprietary schools. The Regents appreciate the assistance provided by these schools in establishing this precedent of reviewing noncollegiate post-secondary education.

The statements of the three proprietary schools have been consolidated and reviewed as they relate to institution goals, current status, and problems and issues. They are followed by the Regents position statement. Through this organization, it is hoped that their common perspective in post-secondary education will be readily evident.

Institutional Goals—The very definition of a proprietary institution of post-secondary education precludes an analysis and interpretation that might well apply to either public or private nonprofit colleges. Since proprietary schools are profit-making organizations, their goals must be realistic and cannot be projected too far into the future. They must keep in constant touch not only with the academic and vocational world, but also with the very important legislative and political scene to maintain profitability.

With respect to the purpose and goals of these institutions, they indicated that their primary purpose was to prepare men and women to enter employment in business occupations, to secure promotions in those occupations, and to better inform consumers in society.

Current Status—Enrolled in these reporting institutions (as of June 1972) were 3,500 students on both a full- and a part-time basis. These institutions indicated that they desire to increase their enrollments by between 10 and 15 percent by 1980. In addition, they intend to expand their programs by offering opportunities to students in summer, evening, extension, and specialized offerings.

The programs offered by proprietary schools fall in a wide range of occupational designations. Most of these programs terminate in certificate courses in secretarial training, bookkeeping, and typing. Some proprietary institutions combine liberal arts courses with occupational courses so that a student may continue his education in a transfer program in a college setting.

In addition to the business courses, additional courses are offered in fashion merchandising, computer programming and data processing, dentist's and doctor's assistant programs, commercial art, interior design and decoration, traffic management, travel and tourish administration, and other selected fields.

The physical facilities of proprietary schools seem to be more fully utilized than those of collegiate post-secondary institutions as shown by a recent survey dealing with space utilization.

The quantity of faculty appears to be presently adequate. Salary levels are comparable to other sectors of post-secondary education. There do not appear to be major crises in these areas in the foreseeable future.

There is some student financial aid such as student loans, scholar incentive awards, part-time employment, government grants, and State and private scholarships.

Problems and Issues—The participating proprietary institutions cite an increasing need for short term, specialized business-vocational education in forthcoming years. They maintain that their kind of institution, with its vigorous job placement efforts and highly relevant curriculums, provides the best training opportunities for people of all ages who are seeking a business vocation.

The statements from the three institutions appeal for increased scholar incentive payments, so that a student may be able to choose among the full range of post-secondary institutions in the State. Current incentive awards are insufficient to allow low- and low-middle-income students to further their education at proprietary schools, thus the continuing need for community college expansion—at a higher cost to the taxpayer.

Regents Position

The Regents recognize the critical importance of including non-collegiate post-secondary education in their 1972 statewide plan. This recognition is a prerequisite toward realizing the goal of equal educational opportunities and toward providing a variety of alterna-

tives necessary for a truly comprehensive system of post-secondary education.

With the present statements from the three proprietary business schools as a precedent, the Regents urge all such institutions to provide similar statements to incorporate an even broader perspective in their 1974 progress report. Only in this way will the comprehensive development of higher education become reality.

The Third Division: The Role And Function of the Regents In Post-Secondary Educational Planning

The Regents is the body in New York State which has the total responsibility for developing educational policy and overseeing its execution. The role of the Regents describes the status of the Regents as chief educational policymakers within the Education Law of the State. The function of the Regents denotes the way they execute their policies as an organizational unit.

Part I: The Role of the Regents in Post-Secondary Education

The Regents are the chief policymakers for education at all levels as mandated by the Constitution¹³⁵ and the Education Law of New York State. Their role, therefore, is that of educational statesmen. They are empowered by the Education Law, article 5, part I, section 207 to set policy for every level and every sector of education and oversee its execution. With respect to policy, they charter and license post-secondary institutions, both collegiate and noncollegiate.¹³⁶ They also assure quality of education through the registration of programs.¹³⁷

They coordinate planning by establishing goals and objectives for the development of post-secondary educational programs; they

¹³⁵ New York State Constitution, article XI, section 2.

¹³⁶ New York State Education Law, section 214.

¹³⁷ New York State Education Law, section 207.

recommend legislation necessary for the implementation of these programs when necessary; and they maintain a balance among the educational resources¹³⁸ of the various sectors of post-secondary education. They license practitioners in and supervise the practice of the professions: medicine, dentistry, veterinary medicine, pharmacy, nursing, podiatry, optometry, and others requiring professional training. They also set the criteria by which out-of-state professionals are permitted to practice in New York State. They determine what institutions and what educational programs from outside the State may be permitted to operate within New York State. The Regents continually assess the State's educational resources, initiate action to rectify inadequacies and inefficiencies, and recommend actions in an attempt to maintain an equilibrium between supply and demand throughout the entire educational system.

Each sector of post-secondary education within the State is required by law to respond to the Regents request for educational information and program development whether it be the State University of New York, The City University of New York, private colleges and universities, proprietary vocational schools, county vocational education, or occupational education programs operated within the public educational system.¹³⁹

The legal mandate given to the Regents is considerable, and the successful implementation of this plan for post-secondary education depends on their ability to play a strong coordinating role. The Regents will fulfill their legal mandate by assuring strong leadership of The University of the State of New York¹⁴⁰ to foster the cooperation between public and private sectors that is essential to effect the needed changes in post-secondary education. They will encourage experimentation and reexamine their roles to assure themselves of relevance and responsiveness to change. If post-secondary education is to be flexible and viable to the citizens of the State, it must be governed by a strong, yet adaptable, coordinating board.

¹³⁸ Enrollments, programs, faculty, facilities, libraries, and community services.

¹³⁹ New York State Education Law, sections 207, 215, 237, and 4602.

¹⁴⁰ The University of the State of New York is comprised of all educational institutions in the State.

Part II: The Function of the Regents in Post-Secondary Education

The Regents function macrocosmically in post-secondary education. Their chief function entails the interpretation of statutes pertaining to the coordination and direction of the State's comprehensive system of post-secondary education, including collegiate and noncollegiate institutions. To execute this function in an orderly manner they have established a set of guidelines known as the Rules of the Board of Regents. As these rules are filed with the secretary of state, they have the force and effect of law. It is within these rules that they empower the Commissioner of Education to administer the policies they establish. The scope of the rules ranges from procedures for chartering institutions and registering curriculums to setting the bounds within which professionals may practice. The rules are also designed to help determine the kinds of programs necessary to best meet the needs of the population; they include criteria of admission to professional schools and standards of excellence required for teacher certification. The rules are flexible. They provide for innovations in such areas as programs, interinstitutional cooperation, and institutional-industrial-community cooperation, among others.

Section 1: The Role of the Commissioner of Education in Post-Secondary Education

The Commissioner of Education is the executive officer of the Regents. He also carries the title, "President of The University of the State of New York." In this capacity, his responsibilities include acting as liaison officer for the Regents, administration of the policies established by the Regents, and the general supervision of the educational and cultural agencies of the State.

With regard to post-secondary education, the Commissioner is responsible for planning of all phases of post-secondary education, which culminates in the development of the statewide plan. He is

thus responsible for the execution of the planning process, and for the implementation of the mechanisms generated to meet Regents goals and objectives in post-secondary education. He acts as liaison with the State Legislature and with the community at large. He also establishes procedures and regulations¹⁴¹ for overseeing the operations of all post-secondary institutions in the State, in accordance with existing statutes and the Rules of the Board of Regents.

Section 2: The Role of the State Education Department in Post-Secondary Education

The State Education Department is the Regents administrative agency. Under the direction of the Commissioner, the Department is responsible for the coordination and implementation of policies established by the Regents. This responsibility includes the development of mechanisms designed to achieve Regents objectives and priorities in a timely manner. The Department thus takes an active role in educational planning, program registration, teacher certification, licensing of proprietary institutions, institutional chartering, and in providing assistance to and supervision of the academic and administrative functions of the educational institutions of the State.

The Department therefore is in a unique position to actively promote change in the post-secondary educational system. Some of the ways in which this will be accomplished are:

1. By a modification of the criteria the Department uses to charter institutions, thereby making it more difficult for new institutions with marginal resources to come into existence. The Regents recommend that the law governing chartering (section 218) be altered.
2. By limiting the registration of programs by the Department to those classified as major programs by the Higher Education General Information Survey. This will decrease the administrative burden presently in operation and allow for institutional efforts to be shifted to reporting the numbers and kinds of students it registers, the purpose of the institution, and the programs to be offered (full disclosure).
3. By devising alternate methods for accrediting teachers which are field-centered and competency-based, and by en-

¹⁴¹ "Rules of the Board of Regents and Regulations of the Commissioner of Education," Albany, N.Y.: New York State Education Department, 1971.

couraging the periodic redemonstration of competence by teachers in their specific field.

4. By implementing a statewide planning management information system for post-secondary education to provide the data essential for effective long-range planning.
5. By sharing the program evaluation process, traditionally the sole responsibility of the State Education Department, with the colleges and universities for more realistic overall assessment.

Section 3: The Structure of Collegiate Post-Secondary Education in New York State

There are three collegiate post-secondary sectors within The University of the State of New York, two public and one nonpublic. The two public sectors are the State University of New York and The City University of New York. The nonpublic sector is composed of the 134 private colleges and universities chartered by the Regents.

The State University of New York

The State University of New York was established by act of the 1948 Legislature as a corporate entity within the State Education Department.¹⁴² The purpose of this act was to provide an organizational mechanism for the coordinated development of publicly supported higher education on a statewide basis. Under the aegis of the Regents, the State University Board of Trustees assumed jurisdiction over the 29 existing State-supported institutions on April 1, 1949. These included 11 teachers colleges, several specialized colleges, six 2-year agricultural and technical institutes, and five temporary institutes of applied arts and sciences. The temporary institutes became community colleges in 1953.

The State University¹⁴³ is governed by a 15-member board of trustees, appointed by the Governor, by and with the advice and consent of the senate, for 10-year terms. The Governor designates one member as chairman and one as vice chairman. The board of trustees appoints its own officers, the chancellor of the university, the secretary of the university, senior members of the central administra-

¹⁴² New York State Education Law, section 352.

¹⁴³ The State University of New York consists of 72 units, and a delineation of its composition can be found in appendix F. The classification of the State University units can be found in appendix G.

tive staff, and the chief administrative and senior officers of the campuses.

The City University of New York

The City University of New York is a publicly supported institution of higher education in the City of New York offering undergraduate and graduate training through the doctoral level. Created in 1961 by act of the State Legislature,¹⁴⁴ The City University traces its origin to 1847 when the Free Academy, which was renamed the "College of the City of New York" in 1866, was authorized by referendum by the people of the City of New York. The Municipal College System developed with the creation of Hunter College in 1870, Brooklyn College in 1930, and Queens College in 1937.

In 1926, the board of higher education was established with jurisdiction over "that part of the public school system within the city which is of collegiate grade and which leads to academic, technical, and professional degrees." The board of higher education is authorized and required to organize the faculties of the various colleges under its jurisdiction¹⁴⁵ and to establish and conduct courses and curricula and to prescribe conditions of student admission, attendance, and discharge. The board is separately empowered to sponsor community colleges and to be the board of trustees of its sponsored community colleges.¹⁴⁶

The board has a membership of 21 persons, appointed by the mayor of the City of New York for 9-year terms, and one ex-officio member, the president of the board of education. They serve without salary.

The board of higher education has legal relationships with the Board of Regents and the trustees of the State University. Under the latter, the curriculums of the community colleges sponsored by the board of higher education must be approved by the State University trustees since the community colleges are administered under the program of the State University. As is true of all community colleges, the naming of a president must be approved by the trustees of the State University.

¹⁴⁴ New York State Education Law, section 6201.

¹⁴⁵ See appendix O, p. 318.

¹⁴⁶ New York State Education Law, section 6306.

The Private Colleges and Universities

All institutions of higher education operated under private auspices and not created by legislative charter are legally created by the Regents through the act of chartering. A charter is an instrument of incorporation admitting an institution to membership in The University of the State of New York, thus making each institution so established subject to the supervision of the Regents and the Commissioner of Education according to their rules and regulations and the laws of the State of New York.¹⁴⁷ Individual institutional control is vested with the original incorporators, or their successors, acting as a board of trustees. The powers of trustees of institutions are outlined in section 226 of the Education Law.

There are currently 134 private institutions¹⁴⁸ of higher education in New York State: 16 of these are junior colleges and 118 are senior colleges or universities. Although diverse in size, purpose, and mission—ranging from small, single-purpose institutions, such as seminaries, to well-known, multipurpose institutions—all are bound together through membership in The University of the State of New York. A majority are yet further unified in their planning endeavors through membership in the Commission on Independent Colleges and Universities.

Section 4: The Structure of Noncollegiate Post-Secondary Education in New York State

Noncollegiate post-secondary education in this State is identified as that portion of post-secondary education provided through occupational programs in the public educational system; private occupational, business, and correspondence schools, including nondegree-granting proprietary institutions; government-sponsored manpower training programs; industrial and apprenticeship training programs; and a variety of continuing education programs for adults. The Regents have begun to review and approve proprietary school programs and to grant permission, based upon an evaluation of the strength of specific programs, to award degrees. The Education Amendments of 1972 (P.L. 92-318) have identified and stressed the urgency for more careful identification and planning for educational and training programs beyond high school to meet the needs of returning veter-

¹⁴⁷ New York State Education Law, section 214.

¹⁴⁸ A classification of these institutions is in appendix H, p. 322.

ans, adults, and high school graduates who do not elect to pursue formal college training. Special task forces are being established to identify those programs which are in greatest need of establishment or encouragement—programs that permit post-high school students to pursue a kind of education especially tailored to their needs. These task forces are instructed to report to the Regents such programs as should be given specialized Regents attention. Furthermore, the noncollegiate sector will be more actively involved in providing information and insights for the 1974 progress report.

Summary of Regents Recommendations and Positions

This is a summary of all the recommendations made and positions taken by the Regents throughout this document. The recommendations are arranged in the same order as they appear in the text.

Regents Recommendations

1. To assure that by 1980 every high school graduate (or the equivalent), having the aptitude and motivation for post-secondary education, will have the opportunity to be admitted to a program of study suited to his educational needs and that this opportunity be afforded without regard to race, creed, sex, age, national origin, or economic status.
2. To develop and implement by 1980 a comprehensive system of post-secondary education, utilizing wherever feasible the principle of regionalization, to provide the following:
 - a. A diversity of programs designed to offer increased options to all students whatever their reasons for attending a post-secondary institution, be it
 - (1) to work toward a degree,
 - (2) to increase expertise in their chosen field,
 - (3) to take courses for self-enrichment;
 - b. Open access to post-secondary educational opportunities for people of all ages;
 - c. Flexible admissions criteria for easier entry and reentry into and among post-secondary institutions;
 - d. Maximum utilization of physical facilities and personal resources through interinstitutional cooperation; and
 - e. Consideration of the national and international implications of post-secondary education.
3. To maintain and strengthen the quality of graduate education in New York State through prudently using currently

available resources, avoiding duplication and proliferation, and continually reassessing and realigning program offerings in response to the changing needs of individuals and of society.

4. To encourage all post-secondary educational institutions to enlarge their commitment to and to be more responsive to the needs of the communities in which they exist, be they local, State, national, or worldwide.
5. To insure that integration in post-secondary institutions becomes a fact in all areas, including student enrollments, faculty personnel, and residential accommodations under the auspices of the institutions.
6. To develop and implement a post-secondary planning and management information system to serve the needs of the State and to be compatible with the work being carried on by the United States Office of Education through the National Center for Higher Education Management Systems at the Western Interstate Commission for Higher Education. This system would provide a realistic data base for implementation of the above objectives.

To Strengthen Undergraduate Education

The Regents recommend that

1. colleges and universities base admission on desire and need for further education, placing students in programs suited to their capacities
2. colleges and universities offer admission guaranteed to be available for at least 3 years, grant leaves of absence readily, allow reentry without red tape or penalty, and minimize prerequisites and requirements of specific courses
3. colleges and universities introduce students to the world of work and creativity by incorporating first-hand experience of students' vocational interests in their curriculums through cooperative education, internships, independent study, and research into life situations
4. colleges and universities relax existing program structures so that an adult may enter or reenter formal education to achieve specific goals throughout his lifetime
5. colleges and universities provide educational opportunities for credit which are outside the formal campus via open universities, external degrees, and the use of a variety of educational mass media
6. create alternate routes to careers in the various professions which do not depend on courses and degrees
7. colleges and universities allow more flexible time units for the completion of both course and degree requirements so that all students are not locked into the same time frame

8. a social services corps which would educationally tutor students in such places as inner-city schools and rural communities be established
9. colleges grant academic credit and governments extend financial assistance to those who pursue collegiate post-secondary education outside formal institutions. Subsidized loans and scholar incentive awards should be established for a student's social service and for acceptable study proposals.
10. commissions composed of secondary and collegiate personnel to develop better articulation between high school and collegiate levels to reduce overlap and the time required to complete educational goals be established
11. existing regulations and guidelines be reviewed to eliminate obstacles to a more flexible system while maintaining excellence in programs
12. community colleges and agricultural and technical colleges examine current practices in admissions and instruction in programs which are career-oriented at the 2-year level to increase the numbers of graduates who enter the job market
13. serious consideration be given to revising the structure for guidance, counseling, and advisement services on campuses to decentralize the services, thus increasing accessibility to students
14. community colleges be fully integrated into a regional system of public and private higher education to insure delivery of educational services to all who desire and need such services
15. occupational programs at the community colleges be more fully articulated with programs in the secondary schools and with Boards of Cooperative Educational Services (BOCES) to provide a better continuum of opportunity for graduates of the secondary schools to pursue their career choice at the community college level. This should include provisions for advance standing based on performance criteria where appropriate.
16. administrative and program differentiation between the regular day programs and continuing education programs be eliminated. This should result in a "one-college" operation that allows individuals to differentiate their own pace and pattern for further education.
17. State University reassess the six agricultural and technical colleges
18. planning be undertaken to determine the best utilization schema for the urban centers and the cooperative college centers in the State. Particular attention should be paid to

- the mission, role, functions, and clientele of these institutions as well as the role played by private colleges now cosponsoring cooperative college centers and to the differing conditions in various urban settings.
19. expanded programs of occupational education in the urban centers be effected as soon as possible. This should result from careful planning and assessment of the needs of people, employers, and society.
 20. legislation be enacted to accomplish the following:
 - a. the expansion of the role of the college to include the authority to administer the budget of the college once it is approved by local sponsors
 - b. the reconstitution of local service areas for community colleges along lines that will more adequately reflect population densities rather than political boundaries. Pending the reconstitution of local service areas, establishment of new community colleges or multiple campuses for existing community colleges should be curtailed. The Regents are aware that forecasted demands for adequate educational services in urban areas may require that new community colleges or new campuses of existing community colleges be created by 1980.
 - c. the jurisdiction of The City University over the community colleges in New York City locally sponsored by the Board of Higher Education
 21. a regional examining center be established in the northeast portion of the Nation to serve as a "credit bank" for those who have studied in whole or in part by nontraditional means
 22. collegiate post-secondary institutions in the State work together and with the Regents to encourage and recognize independent learning on the post-secondary level, whether such learning takes place on their individual campuses or not
 23. collegiate post-secondary institutions initiate broader programs of independent study for regularly enrolled students, particularly in introductory level courses
 24. the public and private collegiate post-secondary institutions expand the scope and the variety of such new departures as the State University's Empire State College and Syracuse University's bachelor of arts in liberal studies
 25. the State support expanded offerings in the College Proficiency Examination Program to undergird the Regents external degrees and to meet pressing needs for validation of college-level independent study in crucial areas of societal concern such as police science, reading instruction, and the allied health fields

26. the State explore, evaluate, and publicize—for those who either choose to or must study on their own—the noncollegiate learning experiences available through The University of the State of New York. These include libraries, museums, proprietary schools, industrial training programs, and home study materials delivered through the various technologies, all of which constitute an unrealized part of the educational resources of the State.
27. the possibilities of establishing an interstate regional examining center to evaluate post-secondary learning experiences and to award course credit for appropriate collegiate learning be explored
28. every effort be made to balance expenditures with income in the development and administration of programs to validate independent study on the collegiate level
29. counseling services in both secondary and post-secondary institutions be expanded to provide full advice concerning the options of study available to the student
30. colleges consider the careful development of 3-year curricular options for qualified students in appropriate fields. Institutions contemplating 3-year baccalaureates should, however, thoroughly rethink the nature of the curriculum and take care not to unduly imbalance the curriculum in favor of specialized work in the major.
31. institutions be encouraged to develop early admissions programs which would give full college credit for accepted achievement
32. article 13 of the Education Law dealing with Scholar Incentive Awards be amended in two ways:
 - a. to assure that payments awarded to students be based on credit hours taken to enable needy part-time students to qualify
 - b. to extend the number of semesters a student may receive scholar incentive awards from eight to 10 for a student pursuing a baccalaureate degree and from four to five for a student pursuing an associate degree
33. all higher education institutions in New York State, according to their financial abilities, plan to expand enrollments of minority group students, over and above opportunity program students, and to submit corroborative data to this effect
34. colleges and universities in the State consider their responsibility to those citizens of the State who are unable to go where educational services are traditionally provided (including the rural poor, prison employees, prison inmates and other personnel with restricted assignments), and create programs and courses that are appropriate for and geographically available to the people

35. enrollment in all opportunity programs increase to 45,000 in 1980 to increase opportunity for minority groups while providing balanced minority enrollments in opportunity and nonopportunity programs. The HEOP program should be expanded to 12,000 students by 1980 to insure adequate representation in the private sector.

To Strengthen Graduate and Professional Education

The Regents recommend that

36. all currently authorized master's programs be reviewed
37. institutions should withdraw those programs which, upon evaluation, prove to be (a) inactive or underenrolled, (b) of marginal quality and which cannot be strengthened by sharing resources with other institutions, and (c) below the minimum standards set by Commissioner's Regulations
38. additional institutions not offer master's programs unless the circumstances are most unusual or the program is a cooperative venture. Those institutions already authorized to offer master's programs should (a) define the primary objectives of current or new programs, (b) make explicit the practices which will enable students to achieve them, and (c) periodically verify the need for these programs.
39. wherever possible, the purposes of professional certification and licensing be separated from those of general master's degrees. A master's program which is required as part of professional certification requirements or which serves as an introductory level for a higher degree should be a detachable program with goals and an integrity of its own.
40. academic advising facilities be equally available to all categories of master's students, whether they attend college in the day or evening, in summer or regular sessions, are part-time or full-time students, or are matriculated or non-matriculated students
41. institutions find appropriate ways to evaluate their efforts in master's education through followup studies of graduates' continuing education and career development, analysis of reasons for students' withdrawal from programs, testing of graduates, investigation of intangible factors, visits by external reviewers, and joint reviews with employers of the effectiveness of their graduates' education
42. a pilot program be initiated based on the concept of the engineering development program to provide a new option for post-baccalaureate training for engineering personnel
43. the current Joint Committee on Professional Practice of the New York State Boards for Medicine and Nursing pursue the delineation of the appropriate relationships in practice among the physicians, the physicians' associate, the

- specialists' assistant, and the registered professional and licensed practical nurse.
44. the medical and dental schools of the State report, by June 1, 1973, the further steps they are taking to increase their educational output (enrollments and degrees) and to improve the effectiveness and efficiency of health care delivery through measures such as program innovation, curriculum redesign, and continuing education opportunities
 45. the State and Federal governments approve appropriate incentive plans for all health care personnel that will guarantee a more equitable distribution of these professionals throughout the State
 46. further plans in the health professions area be considered in relation to the recommendations of the New York State Health Planning Commission at such time as its report is made available.

To Provide for the Enrollments and Degrees in Higher Education

The Regents recommend that

47. the projections for full-time enrollment shown in table 3 on page 84 be approved as the basis for planning in order that the Regents enrollment objectives be achieved. However, because of the uncertainties associated with the projections, especially with respect to the need for a new financing arrangement, the Regents approve undergraduate enrollment goals for the State and City universities only through 1975 and defer action on the goals for 1980.
48. the projections for full-time graduate enrollment in table 3 on page 84 be approved for long-range planning, but the Regents defer specific approval of the enrollment goals pending their action on the Report of the Commission on Doctoral Education
49. new financial arrangements be developed to enable private institutions to meet the undergraduate enrollment goals in the master plan of the Commission on Independent Colleges and Universities
50. State University accelerate the development for its senior campuses of admissions procedures that utilize other criteria in addition to high school achievement
51. mechanisms be developed to enable private institutions to play a more vital role in meeting the educational needs of 2-year college graduates.

Ir. Consideration of the Higher Education Resources

The Regents recommend that

52. all higher education institutions assure maximum remuneration and career advancement for excellence in the art and science of teaching

53. faculty members assume a major role in the implementation of innovations and flexibility in program design
54. departments within higher education institutions consider the desirability of sharing faculty through regional joint appointments
55. all higher education institutions in the State reassess their recruitment and promotion policies to assure that a truly diverse faculty be enlisted which will include members of minority groups, women, and experienced practitioners from business, industry, and the cultural institutions of our society, and that they report their progress along these lines in their 1974 progress report
56. faculty members assume that academic responsibility essential to academic freedom, and that all higher education institutions establish procedures to assure faculty members due process of grievance when their academic freedom is challenged
57. guidelines for tenure, including goals and current faculty tenure proportions by faculty rank, sex, and ethnic identity and procedures for the dismissal of incompetent tenured faculty be reported by all institutions in their 1974 progress report
58. institutions investigate ways to increase faculty productivity as one way to increase the utilization of institutional resources
59. faculty continue in its traditional role in academic matters in cooperation with the administration, and that the following matters not be subject to collective bargaining:
 - a. Academic tenure should be awarded to individual faculty members according to the process set by the bylaws of the institution. It is a process which involves the faculty, academic departments, and the administration. Faculty should participate as an academic body and not as a collective bargaining unit.
 - b. Curriculum development and revision should remain the responsibility of the academic departments, departmental faculty, and the administration of individual institutions.
 - c. The processes for faculty evaluation, promotion, and retention should be provided for in the bylaws. The processes should not be defined by the terms of collective bargaining contract.
 - d. Student/faculty ratios and class size are and should remain a determination of the academic department and the administration.
 - e. Administrative and/or academic organizational structure is a prerogative of the administration.

60. in the area of academic libraries
- a. that where 3R's regions and higher education planning regions are not coterminous, effective interface be achieved by insuring that the Regents advisory councils in the higher education regions make full use of the expertise that has been developed in the 3R's Systems through their representation on these councils and the relevant task forces
 - b. that appropriate utilization be made of the resources of all types of libraries—public, industrial, research, hospital and medical, and the museum libraries that make up the membership of the nine 3R's Systems—to meet the regional post-secondary educational needs of the State
 - c. that librarians be included on advisory committees related to higher education at State, regional, and institutional levels
 - d. that the device of contract between 3R's Systems and regional associations of institutions of higher education be exploited
 - e. that the higher education regions jointly with the 3R's Systems designate certain libraries and/or collections of strength as resource libraries that will be available to all students and faculty in institutions of higher education in the regions. Such designated libraries should receive appropriate compensation for serving a regional role.
 - f. that every institution of higher education have a library that meets threshold adequacy as regards resources, staff, and facilities. Therefore, the Regents recommend, in principle, that the guidelines developed by the Advisory Committee on Long-Range Planning for Academic Libraries in New York State become standards for all academic libraries in the State. While interlibrary cooperation through the 3R's Systems and regionalism is encouraged, it is recognized that the effective use of the concept of shared resources and facilities will be eroded if individual institutions do not have basic resources and facilities on site.
 - g. that academic institutions provide special library instruction and counseling for students needing remediation
 - h. that effective use be made of all media and instructional technology including the development of an information retrieval and dissemination system when such methodology serves program objectives
 - i. that as joint curricular development evolves so should joint acquisitions programs be developed among insti-

- tutions of higher education. This should be fostered through the ongoing joint acquisitions committees of the 3R's Systems.
- j. that the State enact legislation in support of reference and research library service as recommended by the report of the "Commissioner's Committee on Reference and Research Library Resources (1961)" and the "Major Recommendations of the Regents for Legislative Action, 1972." Such legislation would provide support for the 3R's Systems and for State level programs including research collection development, NYSILL, etc.
 - k. that in recognition of the vitally important role of the Research Libraries of the New York Public Library in the total library network of the State and in the key role the library plays in the support of academic library service including the State University of New York, The City University of New York, and the private colleges and universities of New York, the State increase its support for the Research Libraries of the New York Public Library in order to enable it to continue and to strengthen its support services such as catalog and other bibliographic assistance to the academic and research libraries of the State.
61. comprehensive long-range facilities planning be continued at all levels in order to forestall the construction of new buildings when existing facilities can be altered to serve the same purpose at a lesser cost
 62. the Space Factors Committee continue to develop space factors that can be used to assess the amount of space available in the State, to determine how it is utilized, and to assess proposals submitted for approval of new facilities
 63. the Dormitory Authority continue to exercise restraint in the authorization of new facilities construction in the non-public sector, especially if they expand capacity, and that the Authority continue to seek the advice of the Commissioner regarding academic need
 64. the State University of New York seek out ways to further improve space utilization of its facilities including year-round academic calendars and conversion of unused dormitory space to faculty office or instructional space
 65. The City University of New York identify individual senior college facilities priorities within these constraints:
 - a. that the overall space of the senior colleges not exceed 100 net assignable square feet per full-time equivalent student
 - b. that no construction take place which is not a part of a

- master plan approved by the Regents and the Governor
- c. that no more than \$520 million be authorized for senior college facilities expansion prior to June 30, 1976, based upon estimates of university income available for construction and of appropriate outstanding obligations.
 66. private collegiate institutions reexamine their facilities plans, investigate ways to increase space utilization (including year-round academic calendars and conversion of unused dormitory space), and limit construction to essential projects
 67. a student allocation model be developed which will identify alternatives for reducing the disparities among sector space utilization rates
 68. institutions design faculty assessment and reward devices that will encourage the growth of a faculty mix appropriate to the goals of the school and to its resources
 69. institutions individually and jointly within regions review low enrollment courses and programs and take steps to eliminate or consolidate those that are not essential
 70. institutions seek out and implement new ways of increasing faculty productivity and lessening the time required for learning; institutions consider reorienting schedules around a 12-month year and around the material content of courses; and that efforts be made to establish flexible devices for the recognition of nonconventional past learning. Institutions should have concrete steps in process in these areas for inclusion in the 1974 progress report.
 71. institutions critically review their administrative staffing and operational procedures to insure more efficient resource utilization with particular emphasis on facilities and equipment
 72. the State recognize, with a resource reallocation, the contribution of the private sector in providing diverse types of educational opportunities; that the State take immediate steps towards lessening the differential in net costs to students of attendance at public and private colleges and universities.

To Strengthen Noncollegiate Post-Secondary Education

The Regents recommend that

73. post-secondary educational programs be evaluated on their own merits, regardless of the type of institution offering them
74. planning arrangements, both statewide and regional, involve the active participation of the noncollegiate sector
75. student financial aid programs incorporate additional pro-

- visions for adults who wish to continue their education beyond high school
76. students be permitted the choice of applying financial assistance to any post-secondary educational program in the State, including noncollegiate programs
 77. a comprehensive management information system be developed, generating compatible data on the current and anticipated status of all education beyond high school in the State concerning programs, enrollment and graduates, facilities and capacity, faculty, and finances
 78. collegiate and noncollegiate institutions establish cooperative relationships with each other and the world of work for their mutual benefit and for the benefit of students in choosing combinations of study and work activities
 79. formal borderlines between collegiate and noncollegiate post-secondary education be erased through the development of a comprehensive system of post-secondary education that involves no distinction in status.

Regents Positions on the Priority Concern Responses by the Sector Plans

The Regents reaction to the responses to their priority concerns by the State University, The City University, and the Commission on Independent Colleges and Universities on behalf of the private colleges and universities are herein summarized. A more detailed account may be found in the second division of this document.

The Regents Position in Regard to State University

The Regents position on the response to the State University of New York is more in the nature of comment rather than the formal judgment as in the case of the recommendations. The positive and constructive approach evidenced in the response to the 11 priority concerns is indeed gratifying. The Regents are generally in agreement with the concepts enunciated, and are especially pleased at the action-oriented nature of the proposed plans to meet the problems and issues raised in the discussion of the priority concerns.

An example of compatible concepts is found in the finance area, for the Regents concur that, although the State has the primary responsibility for the support of higher education, the student, based on his ability to pay, should assume an equitable share of the cost. The plans for increased accountability enumerated for this area illustrate the "how to" portion of the response.

The Regents are encouraged by plans for deferred admissions programs, intermittent periods of work, travel, and independent study that will provide additional access points to all age groups, eliminate the lock step, and provide individually tailored programs.

This, coupled with the plans to improve the relevancy of all programs and the establishment of honors curriculums, should insure the diversity and quality of the university's program offerings.

One apparent gap in the university's response is in the area of vertical and lateral mobility. The plans put forth for increasing the vertical mobility are encouraged by the Regents, but little attention is given to the need for increased lateral mobility to enable students whose career goals change to adapt with the minimum dislocation and loss of credit.

The straightforward affirmation of the role of the trustees and the powers and responsibilities of the chancellor and the presidents is admirable and exemplifies the responsible character of the responses. A further illustration is the stated policy of the university in relation to manpower needs.

"State University will avoid, however, the advancement or withdrawal of major program investments in response to fluctuations in manpower needs, and will reserve such shifts until they have been justified by major and sustained trends."

The Regents wish to remind the State University that all library development must take place within the framework and requirements of the 3R's Systems.

Since other aspects of the university's response to the Regents priority concerns have been treated elsewhere in the statewide plan, they are not repeated here.

The Regents look forward to working with the university in providing substance to these plans, and await with interest the rate of implementation to be contained in the 1974 progress report.

The Regents Position in Regard to The City University

The Regents note that most of City University's responses to the priority concerns are, in toto, in general support of the Regents concerns. In some cases, however, the individual response is either inadequate or contrary to Regents policy. An example of the former is the area of economics and financing where spending economies initiated by the university are listed, but no realistic financial proposal is presented.

The Regents are pleased that the report of The Citizens Commission on the Future of The City University of New York has been completed. They look forward to reviewing proposals after the Board of Higher Education has had time to formulate suggested amendments to its master plan.

In the financial aid to students area, the university opts for the maintenance of free tuition, a policy that runs counter to the Regents view that the student, based upon his ability to pay, should assume an equitable portion of the cost of his education.

On the positive side, the Regents commend the university on the development of a variety of programs to meet the post-secondary educational needs of the increasingly diverse population of New

York City. Especially encouraging is the broadening of the commitment to the adult population of the city and the attention given to programs designed to adequately prepare entering students for educational experience so as to reduce attrition.

The Regents view the development of regional relationships as a positive means of enriching educational offerings, and note with pleasure The City University's apparent commitment to the development of complementary relationships. The keen awareness of the university's role in the total development of New York City is underscored by its intent to expand its well-established relationships with various agencies both through program offerings and research. The Regents encourage this increasing commitment and compliment the university on it.

The Regents Position in Regard to the Private Colleges and Universities

The Regents are gratified by the broad scope of the aggregate response of the private institutions to the 11 priority concerns, and by the positive and constructive nature of these responses. This spirit is evident throughout; beginning with internal actions such as cost-reduction campaigns and cost-benefit analyses which underscore the concern for increased accountability and continuing to the statement that the community service role of a university is ". . . advice and technical assistance, research in public problems, [and] training and upgrading of community personnel, public and private."

The Regents are also impressed with the realistic attitude of the private institution responses to their priority concerns.

While the Regents encourage the concept of open admissions and note that it has been implemented in a sense by the generous programs of financial aid, they recognize that a large scale, across-the-board approach to open admissions is more appropriately a responsibility of the public sector. Thus, the Regents encourage the private colleges and universities to develop their unique strengths rather than disperse their limited resources.

The Regents find it refreshing to see some of the private institutions calling for an objective view of the relevancy of the liberal arts, in and of themselves, and proposing the need for clarifying this concept with students rather than abandoning them for the sake of change. The Regents also commend the private institutions for the concern expressed and the programs proposed to insure the relevancy of all offerings to the increasingly heterogenous student body, in terms of age, academic preparation, and socioeconomic background.

The Regents are indeed pleased to learn that the more active participation in the planning process has had the beneficial and stimulating effect noted. In this respect, they look forward to increased evidences of this process in the 1974 progress report of the private colleges and universities.

The Regents Position in Regard to Noncollegiate Post-Secondary Education

The Regents recognize the critical importance of including non-collegiate post-secondary education in their 1972 statewide plan. This recognition is a prerequisite toward realizing the goal of equal educational opportunities and toward providing a variety of alternatives necessary for a truly comprehensive system of post-secondary education.

With the present statements from the three proprietary business schools as a precedent, the Regents urge all such institutions to provide similar statements to incorporate an even broader perspective in their 1974 progress report. Only in this way will the comprehensive development of higher education become reality.

Appendix A

Statistical Tables

Table 10. Percent of Family Members 18 to 24 Years Old Enrolled in College by Family Income and Race for the United States, October 1970

| Race | Total | Family Income Level | | | |
|------------------|-------|---------------------|--------------------|----------------------|-------------------|
| | | Under \$3,000 | \$3,000 to \$9,999 | \$10,000 to \$14,999 | \$15,000 and over |
| (1) | (2) | (3) | (4) | (5) | (6) |
| Total, All Races | 39.3 | 13.7 | 30.2 | 45.7 | 59.8 |
| White | 42.5 | 15.0 | 32.8 | 46.3 | 60.5 |
| Negro | 20.4 | 11.7 | 18.4 | 37.3 | NA |
| Other* | NA | NA | NA | NA | NA |

* Sample size was too small to reliably estimate cell.

Source: U.S. Bureau of the Census, "Current Population Reports: School Enrollment: October 1970," Washington, D.C.: U.S. Government Printing Office, 1971 (Series P-20, No. 222).

Table 11. Graduate Degree-Credit Enrollment at Colleges and Universities in New York State by Control of Institution and Type of Attendance for the Years 1965-71*

| Control of Institution | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 |
|-----------------------------|---------|---------|---------|---------|---------|---------|---------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| <i>Total State</i> | 102,595 | 111,289 | 121,337 | 135,398 | 137,634 | 141,230 | 148,092 |
| Full-Time | 27,674 | 31,048 | 35,176 | 36,037 | 38,476 | 41,097 | 42,637 |
| Part-Time | 74,921 | 80,241 | 86,161 | 99,361 | 99,158 | 100,133 | 105,455 |
| <i>Private Institutions</i> | 68,499 | 75,104 | 80,584 | 87,771 | 84,811 | 84,156 | 85,883 |
| Full-Time | 22,399 | 24,224 | 26,236 | 26,586 | 27,401 | 27,787 | 27,578 |
| Part-Time | 46,100 | 50,880 | 54,348 | 61,185 | 57,410 | 56,369 | 58,305 |
| <i>State University</i> | 14,482 | 15,199 | 18,187 | 21,681 | 25,945 | 30,421 | 34,082 |
| Full-Time | 3,965 | 4,715 | 6,227 | 7,208 | 8,564 | 9,934 | 11,059 |
| Part-Time | 10,517 | 10,484 | 11,960 | 14,473 | 17,381 | 20,487 | 23,023 |
| <i>City University</i> | 19,614 | 20,986 | 22,566 | 25,946 | 26,878 | 26,653 | 28,127 |
| Full-Time | 1,310 | 2,109 | 2,713 | 2,243 | 2,511 | 3,376 | 4,000 |
| Part-Time | 18,304 | 18,877 | 19,853 | 23,703 | 24,367 | 23,277 | 24,127 |

* Excludes selected first-professional enrollments.

Table 12. Net Migration of Degree-Credit Graduate Students to New York State for the Years 1963 and 1968

| | Year | |
|---|--------|--------|
| | 1963 | 1968 |
| (1) | (2) | (3) |
| 1. Non-New York State Residents Enrolled in Institutions in New York State | 14,903 | 23,006 |
| 2. New York State Residents Enrolled in Institutions Outside New York State | 10,005 | 18,814 |
| Net Migration (Row 1 minus Row 2) | +4,898 | +4,192 |

Source: United States Office of Education, "Residence and Migration of College Students," Washington, D.C.: U.S. Government Printing Office, 1963 and 1968.

Table 13. New York State Residents Attending Higher Education Institutions in Graduate Programs by Location and Control of Institution for the Years 1963 and 1968

| Location of Institution | 1963 | | 1968 | |
|--|--------|------------------|---------|------------------|
| | Number | Percent of Total | Number | Percent of Total |
| (1) | (2) | (3) | (4) | (5) |
| <i>New York State Residents Enrolled in All Institutions</i> | 66,155 | 100.0 | 123,133 | 100.0 |
| Public | 14,324 | 21.7 | 51,711 | 42.0 |
| Private | 51,831 | 78.3 | 71,422 | 58.0 |
| <i>New York State Residents Enrolled in New York State Institutions</i> | 56,150 | 84.9 | 104,319 | 84.7 |
| Public | 9,409 | 14.2 | 41,498 | 33.7 |
| Private | 46,741 | 70.7 | 62,821 | 51.0 |
| <i>New York State Residents Enrolled in Institutions in Other States</i> | 10,005 | 15.1 | 18,814 | 15.3 |
| Public | 4,915 | 7.4 | 10,213 | 8.3 |
| Private | 5,090 | 7.7 | 8,601 | 7.0 |

Source: United States Office of Education, "Residence and Migration of College Students," Washington, D.C.: U.S. Government Printing Office, 1963 and 1968.

Table 14. Graduate Enrollment in New York State Institutions by Residence of Student and Control of Institution for the Years 1963 and 1968

| | Enrollment in New York State Institutions | | | |
|------------------------------|---|------------------|---------|------------------|
| | 1963 | | 1968 | |
| | Number | Percent of Total | Number | Percent of Total |
| (1) | (2) | (3) | (4) | (5) |
| <i>All Institutions</i> | 84,518 | 100.0 | 127,325 | 100.0 |
| New York State Residents | 69,615 | 82.4 | 104,319 | 81.9 |
| Non-New York State Residents | 14,903 | 17.6 | 23,006 | 18.1 |
| <i>Public Institutions</i> | 23,606 | 100.0 | 45,445 | 100.0 |
| New York State Residents | 22,874 | 96.9 | 41,546 | 91.4 |
| Non-New York State Residents | 732 | 3.1 | 3,899 | 8.6 |
| <i>Private Institutions</i> | 60,912 | 100.0 | 81,880 | 100.0 |
| New York State Residents | 46,741 | 76.7 | 62,773 | 76.7 |
| Non-New York State Residents | 14,171 | 23.3 | 19,107 | 23.3 |

Source: United States Office of Education, "Residence and Migration of College Students," Washington, D.C.: U.S. Government Printing Office, 1963 and 1968.

Table 15. Master's Degrees Awarded in Selected Academic Fields for the Years 1965-66 and 1969-70

| Academic Field | 1965-66 | | 1969-70 | |
|-----------------------|---------|------------------|---------|------------------|
| | Number | Percent of Total | Number | Percent of Total |
| | (2) | (3) | (4) | (5) |
| Education | 6,144 | 31.7 | 10,427 | 39.1 |
| Business and Commerce | 1,704 | 8.8 | 2,844 | 10.7 |
| Engineering | 2,158 | 11.1 | 2,115 | 7.9 |
| Social Sciences | 1,982 | 10.2 | 1,940 | 7.3 |
| Public Service Cur. | 834 | 4.3 | 1,280 | 4.8 |
| Fine and Applied Arts | 603 | 3.1 | 720 | 2.7 |
| Other | 5,960 | 30.8 | 7,327 | 27.5 |
| Total | 19,385 | 100.0 | 26,653 | 100.0 |

Table 16. Doctoral Degrees Awarded by Academic Field by New York State Colleges and Universities for the Years 1959-60, 1961-62, 1962-63, 1965-66, 1967-68, and 1969-70

| | 1959-60 | | 1961-62 | | 1962-63 | | 1965-66 | | 1967-68 | | 1969-70 | |
|------------------------|--------------|---------------------------|--------------|---------------------------|--------------|---------------------------|--------------|---------------------------|--------------|---------------------------|--------------|---------------------------|
| | Number Total | Percent of National Total | Number Total | Percent of National Total | Number Total | Percent of National Total | Number Total | Percent of National Total | Number Total | Percent of National Total | Number Total | Percent of National Total |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| Bio. Sci. ¹ | 138 | 12 | 134 | 10 | 163 | 10 | 190 | 10 | 255 | 10 | 286 | 9 |
| Educa. | 344 | 22 | 318 | 17 | 346 | 15 | 371 | 12 | 524 | 13 | 637 | 11 |
| Engr. | 83 | 10 | 138 | 11 | 147 | 11 | 247 | 11 | 301 | 10 | 340 | 10 |
| Humanities | 249 | 17 | 228 | 15 | 303 | 15 | 331 | 13 | 474 | 15 | 531 | 13 |
| Math. | 30 | 10 | 37 | 9 | 54 | 11 | 80 | 10 | 99 | 10 | 119 | 9 |
| Phy. Sci. | 215 | 12 | 257 | 10 | 268 | 11 | 302 | 10 | 403 | 11 | 419 | 10 |
| Psych. | 134 | 17 | 141 | 16 | 167 | 16 | 171 | 15 | 191 | 13 | 210 | 11 |
| Soc. Sci. ² | 156 | 19 | 174 | 18 | 171 | 14 | 192 | 14 | 280 | 15 | 483 | 19 |
| Other Fields | 94 | 1 | 173 | 2 | 155 | 1 | 254 | 1 | 193 | 1 | 243 | 1 |
| All Fields | 1,443 | 15 | 1,580 | 14 | 1,774 | 12 | 2,138 | 12 | 2,720 | 12 | 3,268 | 12 |

¹ Biological sciences do not include agriculture or forestry.

² Social sciences excludes history which is under humanities.

Source: National Research Council, New York State Education Department.

Table 17. National Employment of Doctoral Degree Holders by Type of Employment and Work Activity,
January 1969
(In Thousands)

| Academic Field | TYPE OF EMPLOYMENT | | | | TYPE OF WORK ACTIVITY | | | | | | | | |
|----------------|--------------------|-------------------|----------|---------------|-----------------------|-----------------------|---------------|-------------------------|---------------|-------------------------|--------------------------|----------------------|-----------------|
| | Total | Academic | | Nonacademic | | Academic ² | | Nonacademic | | Academic ² | | Nonacademic | |
| | | | Graduate | Undergraduate | R&D | Non-R&D | Percent Total | Percent of Number Total | Percent Total | Percent of Number Total | Percent Research & Other | Percent Teaching R&D | Percent Non-R&D |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| Engineering | 22.6 | 9.7 | 43 | 1.1 | 5 | 9.1 | 40 | 2.7 | 12 | 18 | 30 | 40 | 12 |
| Life Sci. | 39.3 | 16.9 ¹ | 43 | 12.3 | 31 | 7.8 | 20 | 2.3 | 6 | 20 | 54 | 20 | 6 |
| Mathematics | 9.6 | 6.1 | 63 | 2.0 | 21 | 0.8 | 8 | 0.7 | 7 | 27 | 57 | 80 | 7 |
| Physical Sci. | 51.5 | 12.2 ² | 24 | 8.5 | 16 | 25.5 | 50 | 5.3 | 10 | 11 | 39 | 50 | 10 |
| Soc. Sci. | 35.0 | 11.8 | 34 | 13.8 | 40 | 5.4 | 15 | 4.0 | 11 | 16 | 58 | 15 | 11 |
| Total | 158.0 | 56.6 | 36 | 37.7 | 24 | 48.6 | 31 | 15.1 | 9 | — | — | — | — |

¹ Includes 3.2 postdoctorates.

² Includes 3.6 postdoctorates.

³ Net time of all faculty devoted to each activity. Assumed that 40 percent of graduate faculty and 10 percent of undergraduate faculty time devoted to research.

Table 18. High School Graduates, First-Time Freshmen, and Resultant College-Going Rates for New York State Institutions: Actual Data 1961-71; Projected Data 1972-80

| Year | High School Graduates ¹ | Percent Increase Over Previous Year | Full-Time Freshmen ² | Percent Increase Over Previous Year | Percent of F-T Fresh. to H.S. Grads. | Difference of Percent from Previous Year | Full-Time Undergrad. Enrollment | Numerical Increase | Percent Increase |
|---------------|------------------------------------|-------------------------------------|---------------------------------|-------------------------------------|--------------------------------------|--|---------------------------------|--------------------|------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| <i>Actual</i> | | | | | | | | | |
| 1961 | 165,200 | — | 64,600 | — | 39.1 | — | 208,700 | — | — |
| 1962 | 164,500 | -0.4 | 66,400 | 2.8 | 40.4 | 1.3 | 222,500 | 13,800 | 6.6 |
| 1963 | 170,400 | 3.6 | 73,200 | 10.2 | 43.0 | 2.6 | 240,200 | 17,700 | 8.0 |
| 1964 | 209,100 | 22.7 | 90,200 | 23.2 | 43.1 | 0.1 | 267,800 | 27,600 | 11.5 |
| 1965 | 219,600 | 5.0 | 95,800 | 6.2 | 43.6 | 0.5 | 298,500 | 30,700 | 11.5 |
| 1966 | 210,300 | -4.2 | 94,500 | -1.4 | 44.9 | 1.3 | 321,700 | 23,200 | 7.8 |
| 1967 | 222,800 | 5.9 | 104,300 | 10.4 | 46.8 | 1.9 | 347,400 | 25,700 | 8.0 |
| 1968 | 225,200 | 1.1 | 113,600 | 8.9 | 50.4 | 3.6 | 374,500 | 27,100 | 7.8 |
| 1969 | 223,000 | -1.0 | 121,300 | 6.8 | 54.4 | 4.0 | 402,000 | 27,500 | 7.3 |
| 1970 | 233,600 | 4.8 | 140,000 | 15.4 | 59.9 | 5.5 | 439,600 | 37,600 | 9.4 |
| 1971 | 234,300 | 0.3 | 137,700 | -1.6 | 58.8 | -1.1 | 467,100 | 27,500 | 6.3 |

Table 18—Continued

| Year | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|-------------------|------------------------------------|-------------------------------------|---------------------------------|-------------------------------------|---------------------------|--|---------------------------------|--------------------|------------------|------|
| | High School Graduates ¹ | Percent Increase Over Previous Year | Full-Time Freshmen ² | Percent Increase Over Previous Year | F-T Fresh. to H.S. Grads. | Percent of Difference from Previous Year | Full-Time Undergrad. Enrollment | Numerical Increase | Percent Increase | |
| <i>Estimated</i> | | | | | | | | | | |
| 1972 | 237,900 | 1.5 | 140,400 | 2.0 | 59.0 | 0.2 | 488,500 | 21,400 | 4.6 | |
| 1973 ³ | 240,900 | 1.3 | 145,500 | 3.6 | 60.4 | 1.4 | 505,600 | 17,100 | 3.5 | |
| 1974 | 245,100 | 1.7 | 151,200 | 3.9 | 61.7 | 1.3 | 519,100 | 13,500 | 2.7 | |
| 1975 | 252,000 | 2.8 | 159,000 | 5.2 | 63.1 | 1.4 | 540,700 | 21,600 | 4.2 | |
| 1976 | 254,000 | 0.8 | 163,800 | 3.0 | 64.5 | 1.4 | 562,900 | 22,200 | 4.1 | |
| 1977 | 257,900 | 1.5 | 170,000 | 3.8 | 65.9 | 1.4 | 586,700 | 23,800 | 4.2 | |
| 1978 | 258,000 | 0.0 | 173,400 | 2.0 | 67.2 | 1.3 | 607,800 | 21,100 | 3.6 | |
| 1979 | 262,400 | 1.7 | 180,000 | 3.8 | 68.6 | 1.4 | 627,600 | 19,800 | 3.3 | |
| 1980 | 259,300 | -1.2 | 181,500 | 0.8 | 70.0 | 1.4 | 643,000 | 15,400 | 2.5 | |
| 1985 | 234,700 | -9.5 | 171,300 | -5.6 | 73.0 | 3.0 | 635,900 | -7,100 | -1.1 | |
| 1990 | 238,900 | 1.8 | 179,200 | 4.6 | 75.0 | 2.0 | 635,500 | -400 | -0.1 | |

NOTE: See list of footnotes on following page.

List of Sources for Table 18

- ¹ 1961-63 "Projections of High School Graduates," Albany, N.Y.: NYSED, Information Center on Education, 1966.
- 1964-68 "College Going Rate of New York State High School Graduates," Albany, N.Y.: NYSED, Information Center on Education, Annual.
- 1969-70 "Distribution of High School Graduates and College Going Rates in New York State," Albany, N.Y.: NYSED, Information Center on Education, 1971.
- 1971-80 Based Upon Information Center projections revised by OPHE as per "Enrollment Projections in New York State Schools, 1970-71 to 1989-90," Albany, N.Y.: NYSED, Information Center on Education.
- ² 1961-66 "College and University Enrollments," Albany, N.Y.: NYSED, Information Center on Education, Annual Reports.
- 1967-68 "Planning Statistics 1969," Vol. I-A, Albany, N.Y.: NYSED, Office of Planning in Higher Education, January 1970.
- 1969-71 "Planning Statistics, 1972," Vol. I-A, Albany, N.Y.: NYSED, Office of Planning in Higher Education.
- ³ Initial year of planned increase in college-going rate.
- ⁴ Assumptions used in projection methodology:
- New York State will move toward a net outmigration of 13,000 full-time, first-time freshmen by 1980, representing 5 percent of the high school graduates that year.
 - Attrition and degree conferral rates of undergraduate students will follow the 1965-71 patterns.
 - In the 1983-87 period, New York State will move toward a zero net migration. This coincides with a period of rapid decline in New York State high school graduates.

Table 19. Associate and Baccalaureate Degrees Awarded by New York State Colleges and Universities: Actual 1960-61 to 1970-71; Projected 1971-72 to 1979-80

| Year | Associate | Baccalaureate |
|------------------|-----------|---------------|
| (1) | (2) | (3) |
| <i>Actual</i> | | |
| 1960-61 | 7,663 | 34,641 |
| 1961-62 | 8,849 | 35,701 |
| 1962-63 | 10,063 | 39,929 |
| 1963-64 | 10,847 | 44,235 |
| 1964-65 | 12,591 | 46,968 |
| 1965-66 | 15,830 | 49,077 |
| 1966-67 | 19,306 | 52,381 |
| 1967-68 | 20,705 | 60,250 |
| 1968-69 | 24,112 | 66,277 |
| 1969-70 | 26,924 | 67,204 |
| 1970-71 | 30,846 | 72,017 |
| <i>Projected</i> | | |
| 1971-72 | 36,300 | 78,200 |
| 1972-73 | 39,500 | 83,600 |
| 1973-74 | 40,600 | 87,500 |
| 1974-75 | 42,700 | 91,400 |
| 1975-76 | 45,800 | 96,800 |
| 1976-77 | 49,200 | 101,600 |
| 1977-78 | 52,400 | 105,600 |
| 1978-79 | 55,600 | 110,500 |
| 1979-80 | 58,600 | 114,700 |

Table 20. Full-Time Degree-Credit Enrollment at Colleges and Universities in New York State by Level: Actual Data 1965-71; Projected Data 1972-80

| Year | Total Full-Time | Full-Time Undergraduate | Full-Time Graduate and First-Professional |
|------------------|-----------------|-------------------------|---|
| (1) | (2) | (3) | (4) |
| <i>Actual</i> | | | |
| 1965 | 338,300 | 298,500 | 39,800 |
| 1966 | 365,500 | 321,700 | 43,800 |
| 1967 | 395,900 | 347,500 | 48,400 |
| 1968 | 423,800 | 374,500 | 49,300 |
| 1969 | 453,100 | 402,000 | 51,400 |
| 1970 | 494,900 | 439,600 | 55,300 |
| 1971 | 524,900 | 467,100 | 57,800 |
| <i>Projected</i> | | | |
| 1972 | 548,100 | 488,500 | 59,600 |
| 1973 | 567,800 | 505,600 | 62,200 |
| 1974 | 583,700 | 519,100 | 64,600 |
| 1975 | 607,600 | 540,700 | 66,900 |
| 1976 | 633,200 | 562,900 | 70,300 |
| 1977 | 659,000 | 586,700 | 72,300 |
| 1978 | 682,400 | 607,800 | 74,600 |
| 1979 | 704,300 | 627,600 | 76,700 |
| 1980 | 721,800 | 643,000 | 78,800 |

Table 21. Full-Time Graduate Degree-Credit Enrollment¹ in New York State Colleges and Universities by Level: Actual 1970; Projected 1971-80

| Year | Total | Master's | Doctoral |
|------------------|--------|----------|----------|
| (1) | (2) | (3) | (4) |
| <i>Actual</i> | | | |
| 1970 | 41,097 | 24,098 | 16,999 |
| 1971 | 42,637 | 26,002 | 16,635 |
| <i>Estimated</i> | | | |
| 1972 | 43,900 | 27,100 | 16,800 |
| 1973 | 45,900 | 28,700 | 17,200 |
| 1974 | 47,700 | 30,100 | 17,600 |
| 1975 | 49,400 | 31,400 | 18,000 |
| 1976 | 51,700 | 33,300 | 18,400 |
| 1977 | 52,700 | 33,900 | 18,800 |
| 1978 | 54,000 | 34,800 | 19,200 |
| 1979 | 55,000 | 35,400 | 19,600 |
| 1980 | 55,900 | 35,900 | 20,000 |

¹ Excludes selected first-professional disciplines—see table 25, p. 293.

Table 22. Master's Degree-Credit Enrollment by Type of Attendance and Academic Field, Fall 1970

| Academic Field | Full-Time | | Part-Time | | Total | |
|-----------------------|-----------|-------------------------|-----------|-------------------------|--------|-------------------------|
| | Number | Percent* of Total | Number | Percent* of Total | Number | Percent* of Total |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Architecture | 152 | 0.7 | — | — | 152 | 0.2 |
| Agriculture | 345 | 1.5 | 69 | 0.1 | 414 | 0.4 |
| Area Studies | 73 | 0.3 | 124 | 0.2 | 197 | 0.2 |
| Biological Sciences | 553 | 2.4 | 1,054 | 1.5 | 1,607 | 1.7 |
| Business and Commerce | 3,330 | 14.6 | 9,575 | 13.5 | 12,905 | 13.8 |
| Communications | 382 | 1.7 | 213 | 0.3 | 595 | 0.6 |
| Computer Science | 318 | 1.4 | 1,608 | 2.3 | 1,926 | 2.1 |
| Education | 4,539 | 19.9 | 29,411 | 41.5 | 33,950 | 36.2 |
| Engineering | 1,627 | 7.1 | 4,069 | 5.7 | 5,696 | 6.1 |
| Fine & Applied Arts | 1,384 | 6.1 | 1,003 | 1.4 | 2,387 | 2.5 |
| Foreign Language | 449 | 2.0 | 1,289 | 1.8 | 1,738 | 1.9 |
| Forestry | 45 | 0.2 | 21 | — | 66 | 0.1 |
| Geography | 54 | 0.2 | 19 | — | 73 | 0.1 |
| Health Professions | 687 | 3.0 | 442 | 0.6 | 1,129 | 1.2 |
| Home Economics | 90 | 0.4 | 122 | 0.2 | 212 | 0.2 |
| Language Arts | 840 | 3.7 | 2,285 | 3.2 | 3,125 | 3.3 |
| Law | 228 | 1.0 | 545 | 0.8 | 773 | 0.8 |
| Library Science | 773 | 3.4 | 1,362 | 1.9 | 2,135 | 2.3 |
| Mathematics | 304 | 1.3 | 1,094 | 1.6 | 1,398 | 1.5 |
| Military Science | — | — | — | — | — | — |
| Philosophy | 169 | 0.7 | 160 | 0.2 | 329 | 0.4 |
| Physical Science | 552 | 2.4 | 895 | 1.3 | 1,447 | 1.5 |
| Psychology | 563 | 2.5 | 1,277 | 1.8 | 1,840 | 2.0 |
| Public Serv. Cur. | 2,543 | 11.2 | 773 | 1.1 | 3,316 | 3.5 |
| Religion & Theology | 378 | 1.7 | 334 | 0.5 | 712 | 0.8 |
| Social Sciences | 1,844 | 8.3 | 4,235 | 6.0 | 6,079 | 6.5 |
| Other Fields | 569 | 2.5 | 8,917 | 12.6 | 9,486 | 10.1 |
| TOTAL | 22,761 | 100.0 | 70,896 | 100.0 | 93,657 | 100.0 |

NOTE: 1,427 students were unable to be classified by subject field.

* Percents may not add to total due to rounding.

Table 23. Master's Degrees Awarded by Major Subject Field by Control of Institution for the Academic Year 1969-70

| Subject Field | Public Institutions | | Private Institutions | | | |
|-----------------------|---------------------|-------------------------|----------------------|-------------------------|-------|------|
| | Number | Percent* of All Degrees | Number | Percent* of All Degrees | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Agriculture | 42 | 0.2 | 42 | 100.0 | — | — |
| Architecture | 109 | 0.4 | 1 | 0.9 | 108 | 99.1 |
| Area Studies | 44 | 0.2 | 7 | 15.9 | 37 | 84.1 |
| Biological Sciences | 550 | 2.1 | 225 | 40.9 | 325 | 59.1 |
| Business and Commerce | 2,844 | 10.7 | 466 | 16.4 | 2,378 | 83.6 |
| Communications | 241 | 0.9 | 6 | 2.5 | 235 | 97.5 |
| Computer Science | 139 | 0.5 | 9 | 6.5 | 130 | 93.5 |
| Education | 10,427 | 39.1 | 4,649 | 44.6 | 5,778 | 55.4 |
| Engineering | 2,115 | 7.9 | 300 | 14.2 | 1,815 | 85.8 |
| Fine and Applied Arts | 720 | 2.7 | 131 | 18.2 | 589 | 81.8 |
| Foreign Language | 581 | 2.2 | 215 | 37.0 | 366 | 63.0 |
| Forestry | 21 | 0.1 | 21 | 100.0 | — | — |
| Geography | 15 | 0.1 | 4 | 26.7 | 11 | 73.3 |
| Health Professions | 357 | 1.3 | 64 | 17.9 | 293 | 82.1 |
| Home Economics | 97 | 0.4 | 52 | 53.6 | 45 | 46.4 |

Table 23—Continued

| Subject Field | Degrees Conferred 1969-70 | Percent* of All Degrees | Public Institutions | | Private Institutions | |
|-----------------------|---------------------------|-------------------------|---------------------|---------------------------|----------------------|---------------------------|
| | | | Number | Percent* of Subject Total | Number | Percent* of Subject Total |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Language Arts | 1,184 | 4.4 | 460 | 38.9 | 724 | 61.1 |
| Law | 382 | 1.4 | — | — | 382 | 100.0 |
| Library Science | 1,035 | 3.9 | 382 | 36.9 | 653 | 63.1 |
| Mathematics | 629 | 2.4 | 234 | 37.2 | 395 | 62.8 |
| Military Science | — | — | — | — | — | — |
| Philosophy | 122 | 0.5 | 15 | 12.3 | 107 | 87.7 |
| Physical Science | 606 | 2.3 | 171 | 28.2 | 435 | 71.8 |
| Psychology | 450 | 1.7 | 53 | 11.8 | 397 | 88.2 |
| Public Service | 1,280 | 4.8 | 386 | 30.2 | 894 | 69.8 |
| Religion and Theology | 389 | 1.5 | — | — | 389 | 100.0 |
| Social Science | 1,940 | 7.3 | 665 | 34.3 | 1,275 | 65.7 |
| Other | 334 | 1.3 | 110 | 32.9 | 224 | 67.1 |
| TOTAL | 26,653 | 100.0 | 8,668 | 32.5 | 17,985 | 67.5 |

* Percents may not add to total due to rounding.

Table 24. Advanced Degrees Awarded by New York State Colleges and Universities by Type of Degree: Actual Data 1964-65 to 1970-71; Projected Data 1971-72 to 1979-80

| Year | Master's | Selected First- Professional | Doctoral |
|------------------|----------|---------------------------------|----------|
| (1) | (2) | (3) | (4) |
| <i>Actual</i> | | | |
| 1964-65 | 17,357 | 3,185 | 1,947 |
| 1965-66 | 20,339 | 3,434 | 2,252 |
| 1966-67 | 20,422 | 3,560 | 2,489 |
| 1967-68 | 22,226 | 3,664 | 2,720 |
| 1968-69 | 24,570 | 3,586 | 3,078 |
| 1969-70 | 26,653 | 3,203 | 3,268 |
| 1970-71 | 29,730 | 3,906 | 3,357 |
| <i>Projected</i> | | | |
| 1971-72 | 30,600 | 4,000 | 3,300 |
| 1972-73 | 31,000 | 4,050 | 3,360 |
| 1973-74 | 31,600 | 4,250 | 3,440 |
| 1974-75 | 31,900 | 4,500 | 3,520 |
| 1975-76 | 32,800 | 4,750 | 3,600 |
| 1976-77 | 33,700 | 5,100 | 3,680 |
| 1977-78 | 34,300 | 5,350 | 3,760 |
| 1978-79 | 34,500 | 5,700 | 3,840 |
| 1979-80 | 34,600 | 5,950 | 3,920 |

Table 25. Full-Time Selected¹ First-Professional Degree-Credit Enrollment in Colleges and Universities of New York State by Control of Institution: Actual Data 1965-71; Projected Data 1972-80

| | Total All Institutions | Private ² | State University |
|------------------|---------------------------|----------------------|---------------------|
| (1) | (2) | (3) | (4) |
| <i>Actual</i> | | | |
| 1965 | 12,097 | 9,877 | 2,220 |
| 1966 | 12,735 | 10,384 | 2,351 |
| 1967 | 13,232 | 10,706 | 2,526 |
| 1968 | 13,380 | 10,853 | 2,527 |
| 1969 | 12,618 | 9,991 | 2,627 |
| 1970 | 14,224 | 11,452 | 2,772 |
| 1971 | 15,159 | 12,189 | 2,970 |
| <i>Estimated</i> | | | |
| 1972 | 15,700 | 12,400 | 3,300 |
| 1973 | 16,300 | 12,800 | 3,500 |
| 1974 | 16,900 | 13,200 | 3,700 |
| 1975 | 17,500 | 13,600 | 3,900 |
| 1976 | 18,600 | 14,300 | 4,300 |
| 1977 | 19,600 | 15,000 | 4,600 |
| 1978 | 20,600 | 15,500 | 5,100 |
| 1979 | 21,700 | 16,200 | 5,500 |
| 1980 | 22,900 | 17,000 | 5,900 |

¹ Selected first-professional disciplines include podiatry, dentistry, medicine, optometry, osteopathy, veterinary medicine, law, and theology.

² Includes Mount Sinai School of Medicine.

Table 26. Degree-Credit Enrollment in Selected¹ First-Professional Fields by Field and Type of Attendance for Fall 1970

| Selected First-Professional Fields | Full-Time | | Part-Time | | Total | |
|------------------------------------|---------------|-------------------------|--------------|-------------------------|---------------|-------------------------|
| | Number | Percent* of Total | Number | Percent* of Total | Number | Percent* of Total |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Health Professions | 6,495 | 45.2 | 1 | — | 6,496 | 40.3 |
| Podiatry | 190 | 1.3 | — | — | 190 | 1.2 |
| Dentistry | 1,163 | 8.1 | — | — | 1,163 | 7.2 |
| Medicine | 4,897 | 34.0 | 1 | — | 4,898 | 30.4 |
| Veterinary Med. | 245 | 1.7 | — | — | 245 | 1.5 |
| Law | 6,427 | 44.7 | 1,710 | 97.9 | 8,137 | 50.4 |
| Theology | 1,355 | 9.4 | 36 | 2.1 | 1,391 | 8.6 |
| Other | 106 | 0.7 | — | — | 106 | 0.7 |
| TOTAL ALL FIELDS | 14,383 | 100.0 | 1,747 | 100.0 | 16,130 | 100.0 |

¹ Selected first-professional disciplines include podiatry, dentistry, medicine, optometry, osteopathy, veterinary medicine, law, and theology.

* Percents may not add to total due to rounding.

Table 27. Selected First-Professional Degrees Awarded by Major Subject Field by Control of Institution for the Academic Year 1969-70

| Subject Field (1) | Degrees Conferred 1969-70 (2) | Percent of All Degrees (3) | Public Institutions | | Private Institutions | |
|----------------------|--|-------------------------------------|---------------------|------------------------------------|----------------------|------------------------------------|
| | | | Number (4) | Percent of Subject Total (5) | Number (6) | Percent of Subject Total (7) |
| Health Professions | 1,457 | 45.5 | 493 | 33.8 | 964 | 66.2 |
| Podiatry | 44 | 1.4 | — | — | 44 | 100.0 |
| Dentistry | 260 | 8.1 | 61 | 23.5 | 199 | 76.5 |
| Medicine | 1,101 | 34.4 | 380 | 34.5 | 721 | 65.5 |
| Optometry | — | — | — | — | — | — |
| Osteopathy | — | — | — | — | — | — |
| Veterinary Medicine | 52 | 1.6 | 52 | 100.0 | — | — |
| Law | 1,374 | 42.9 | 109 | 7.9 | 1,265 | 92.1 |
| Theology | 372 | 11.6 | — | — | 372 | 100.0 |
| TOTAL | 3,203 | 100.0 | 602 | 18.8 | 2,601 | 81.2 |

Table 28. Summary of Public and Private Student/Faculty Ratios by Type of Institution¹ and Level of Study, New York State 1970-71

| | Total Number of Full-Time Students | Total Number of Full-Time Faculty | Student/ Faculty Ratio |
|--|--|---|------------------------------|
| (1) | (2) | (3) | (4) |
| Total State | 494,915 | 37,720 | 13.12 |
| Total Public | 277,546 | 19,562 | 14.19 |
| Total State University | 206,923 | 14,523 | 14.25 |
| University Centers | 39,032 | 2,700 | 14.46 |
| University Colleges | 49,625 | 3,688 | 13.46 |
| Health Sciences Centers | 3,682 | 1,237 | 2.98 |
| Specialized Colleges | 2,294 | 162 | 14.16 |
| Statutory Colleges | 6,026 | 379 | 15.90 |
| 2-Year Colleges | 106,264 | 6,357 | 16.72 |
| Ag. and Tech. Colleges | 16,621 | 1,050 | 15.83 |
| Community Colleges | 89,643 | 5,307 | 16.69 |
| Outside New York City | 60,235 | 3,401 | 17.71 |
| New York City | 29,408 | 1,906 | 15.43 |
| Total City University | 70,623 | 5,039 | 14.02 |
| Graduate Centers | 1,493 | 303 | 4.93 |
| University Colleges | 69,130 | 4,736 | 14.60 |
| Total Nonpublic | 217,369 | 18,158 | 11.97 |
| Multiversities | 56,868 | 6,224 | 9.14 |
| Universities | 42,646 | 3,221 | 13.24 |
| College Complexes | 50,843 | 3,218 | 15.80 |
| Colleges | 26,680 | 2,107 | 12.66 |
| Engineering and Technical | 21,599 | 1,266 | 17.06 |
| Specialized Colleges | 6,805 | 429 | 15.86 |
| Health Sciences Centers | 2,186 | 958 | 2.28 |
| Seminaries and Religious Train- ing | 3,151 | 357 | 8.83 |
| 2-Year Colleges | 6,591 | 378 | 17.44 |
| Total 4-Year | 382,060 | 30,985 | 12.33 |
| Total 2-Year | 112,855 | 6,735 | 16.76 |

¹ See appendix G, p. 318, and appendix H, p. 322 for institutional category listings.

Table 29. Additional Full-Time Enrollments That Can Be Accommodated at Private Institutions of Higher Education in New York State in Fall 1972

| Institution | Freshman | Sophomore | Upper Division | Total Undergraduate | Master's | Other Graduate | Total Graduate | College Residences Available |
|---------------|----------|-----------|----------------|---------------------|----------|----------------|----------------|------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Total Private | 13,749 | 10,029 | 18,072 | 41,850 | 11,573 | 2,385 | 13,958 | 11,838 |
| 2-Year | 1,132 | 627 | — | 1,759 | — | — | — | 444 |
| 4-Year | 12,617 | 9,402 | 18,072 | 40,091 | 11,573 | 2,385 | 13,958 | 11,394 |

Source: Survey by the Commission on Independent Colleges and Universities, December 1971.

Table 30. Proposed Scholar Incentive Awards ¹ by Family Income Levels for Students Attending Nonpublic Institutions

| Net Taxable Income | Scholar Incentive Award ² | | |
|--------------------|--------------------------------------|---------------------|----------------------|
| | Phase I 1973-74 | Phase II 1974-75 | Phase III 1975-76 |
| (1) | (2) | (3) | (4) |
| \$3,000 and less | \$900 | \$1,200 | \$1,500 |
| 5,000 | 740 | 980 | 1,270 |
| 7,000 | 580 | 760 | 1,035 |
| 9,000 | 420 | 540 | 800 |
| 11,000 | 260 | 320 | 570 |
| 13,000 | 100 | 100 | 335 |
| 15,000 | 100 | 100 | 100 |
| 15,000-20,000 | 100 | 100 | 100 |
| 20,001 and more | 0 | 0 | 0 |

¹ Illustrative for two-child family only, based on 1971 tax table. Actual award for recipients with income exceeding \$3,000 will be reduced in 1973-74 by \$8 for each \$100 of additional income, in 1974-75 by \$11 for each \$100 of additional income, and in 1975-76 by \$11.67 for each \$100 of additional income.

² Award for first 2 years. Students in junior year will receive awards scaled to 80 percent of the basic award, and those in senior year scaled to 60 percent of the basic award. Graduate students would also receive 60 percent of the basic award. Present students would be saved-harmless from any reduction of awards.

Table 31. Transfer Incentive Awards by Family Income¹ Levels for 2-Year College Graduates Attending Nonpublic Institutions

| Net Taxable Income | Transfer Incentive Award |
|--------------------|-----------------------------|
| (1) | (2) |
| \$2,000 and less | \$2,000 |
| 2,001-\$4,000 | 1,800 |
| 4,001- 6,000 | 1,600 |
| 6,001- 8,000 | 1,400 |
| 8,001-10,000 | 1,200 |
| 10,001-12,000 | 1,000 |
| 12,001-14,000 | 800 |
| 14,001-16,000 | 600 |
| 16,001-18,000 | 400 |
| 18,001-20,000 | 200 |
| 20,001 and more | 0 |

¹ Illustrative for two-child family, based on 1971 tax table. Actual award for recipients with income exceeding \$2,000 will be reduced by \$10 for each \$100 of additional income.

Table 32. Projected Sources of Revenues for State University of New York State-Operated Institutions for the Years 1972-73 to 1980-81

| Year | Total Resources Required ¹ | Sources of Income (In Millions of Dollars) | | | |
|---------|---------------------------------------|--|-------------------------------|---------------------------------|--------------------|
| | | State Appropriations ² | Tuition and Fees ³ | Federal Government ⁴ | Other ⁵ |
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1972-73 | 585.2 | 421.6 | 92.0 | 62.8 | 8.8 |
| 1973-74 | 661.0 | 484.5 | 100.0 | 67.4 | 9.1 |
| 1974-75 | 720.8 | 530.8 | 108.4 | 72.2 | 9.4 |
| 1975-76 | 774.9 | 549.5 | 118.1 | 97.5 | 9.8 |
| 1976-77 | 830.1 | 588.7 | 128.2 | 103.1 | 10.1 |
| 1977-78 | 885.9 | 627.4 | 139.1 | 108.9 | 10.5 |
| 1978-79 | 943.0 | 667.0 | 150.3 | 114.9 | 10.8 |
| 1979-80 | 1,003.8 | 708.5 | 162.7 | 121.4 | 11.2 |
| 1980-81 | 1,066.1 | 750.9 | 175.5 | 128.0 | 11.6 |

¹ See table 33, column 6.

² Total resources required minus tuition and fees, Federal Government sources, and other sources.

³ Assumes present tuition schedule increased at 3.5 percent per year (price level change).

⁴ Assumes \$20 million of Federal institutional annual aid beginning in 1975-76.

⁵ Increased at rate of 3.5 percent per year.

Table 33. Resource Requirements of State University
State-Operated Institutions for the Years 1971-72 to 1980-81

| Year | Transfer to Debt Service Reserve ¹ | (In Millions of Dollars) | | | |
|------------------|--|---|-----------------|--|---------|
| | | Projected Educational & General Expenditures | | Total Resources Requirements ⁴ | |
| | | I ² | II ³ | I | II |
| (1) | (2) | (3) | (4) | (5) | (6) |
| <i>Actual</i> | | | | | |
| 1971-72 | 75.7 | 510.9 | — | 586.6 | — |
| 1972-73 | 84.0 | 501.2 | — | 585.2 | — |
| <i>Projected</i> | | | | | |
| 1973-74 | 121.0 | 544.5 | 540.0 | 665.5 | 661.0 |
| 1974-75 | 147.0 | 583.7 | 573.8 | 730.7 | 720.8 |
| 1975-76 | 160.0 | 631.1 | 614.9 | 791.1 | 774.9 |
| 1976-77 | 173.0 | 680.8 | 657.1 | 853.8 | 830.1 |
| 1977-78 | 186.0 | 733.0 | 699.9 | 919.0 | 885.9 |
| 1978-79 | 199.0 | 787.1 | 744.0 | 986.1 | 943.0 |
| 1979-80 | 212.0 | 847.1 | 791.8 | 1,059.1 | 1,003.8 |
| 1980-81 | 225.0 | 910.3 | 841.1 | 1,135.3 | 1,066.1 |

¹ Estimated by the State Education Department based on debt outstanding and amount of bonds issued annually 1966-67 to 1970-71.

² See table 34, column 2 and footnote 1.

³ See table 34, column 3 and footnote 2.

⁴ Transfer to debt service plus educational and general expenditures.

Table 34. Projected Educational and General Costs at State University State-Operated Institutions for the Years 1973-74 to 1980-81

| (In Millions of Dollars) | | | |
|--------------------------|-------------------------------|-----------------|-----------------------------------|
| Year | Educational and General Costs | | Productivity Savings ³ |
| | I ¹ | II ² | |
| (1) | (2) | (3) | (4) |
| 1972-73 | 501.2 | — | — |
| 1973-74 | 544.5 | 540.0 | 4.5 |
| 1974-75 | 583.7 | 573.8 | 9.9 |
| 1975-76 | 631.1 | 614.9 | 16.2 |
| 1976-77 | 680.8 | 657.1 | 23.7 |
| 1977-78 | 733.0 | 699.9 | 33.1 |
| 1978-79 | 787.1 | 744.0 | 43.1 |
| 1979-80 | 847.1 | 791.8 | 55.3 |
| 1980-81 | 910.3 | 841.1 | 69.2 |

¹ Calculated by multiplying projected annual average full-time equivalent enrollments (by level of instruction and type of program) by education and general expenditures per full-time equivalent student (by level of instruction and type of program). The education and general expenditures per full-time equivalent student were increased by 3.5 percent per year, the assumed increase in the price level.

² Calculated in the same manner as 1, education and general expenditures per full-time equivalent student were increased by less than 3.5 percent per year, reflecting savings due to increased productivity. The expected saving will reduce the overall education and general cost per FTE by 8 percent by 1980-81.

³ Column (2) minus column (3).

Table 35. Projected Sources of Revenues for Community Colleges for the Years 1972-73 to 1980-81

| Year | Sources of Income (in Millions of Dollars) | | | | | |
|---------|--|-----------------------------------|-----------------------------------|-------------------------------------|-------------------------------|--------------------|
| | Total Resources Requirements ¹ | State Appropriations ² | Local Appropriations ³ | Federal Appropriations ⁴ | Tuition and Fees ⁵ | Other ⁶ |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1972-73 | 245 | 89.3 | 91.4 | 2.5 | 61.9 | 2.5 |
| 1973-74 | 268 | 100.0 | 91.4 | 2.7 | 71.2 | 2.7 |
| 1974-75 | 292 | 110.1 | 91.4 | 2.9 | 84.7 | 2.9 |
| 1975-76 | 316 | 99.8 | 91.4 | 22.0 | 99.6 | 3.2 |
| 1976-77 | 338 | 117.0 | 91.4 | 22.0 | 104.2 | 3.4 |
| 1977-78 | 364 | 137.0 | 91.4 | 22.0 | 109.6 | 3.6 |
| 1978-79 | 392 | 158.7 | 91.4 | 22.0 | 116.0 | 3.9 |
| 1979-80 | 421 | 182.7 | 91.4 | 22.0 | 120.7 | 4.2 |
| 1980-81 | 450 | 205.5 | 91.4 | 22.0 | 126.6 | 4.5 |

¹ Projected education and general expenditures; calculated by multiplying projected full-time equivalent enrollment (FTE) by education and general cost per FTE. Education and general costs per FTE were increased at the rate of 3.5 percent per year beginning with 1973-74.

² Column (2) minus columns (4) through (7).

³ Local appropriations held constant per this proposal.

⁴ Assumes \$1.9 million of Federal institutional annual aid beginning in 1975-76.

⁵ For the community colleges outside of New York City, assumes present tuition schedule increased at 3.5 percent per year. Assumes establishment of SUNY tuition rates at NYC-BHE community colleges with freshmen of 1973-74.

⁶ Assumed to be 1 percent of total resource requirements.

Table 36. Projected Sources of Revenues for The City University of New York for the Years 1972-73 to 1980-81

| Year | Total Resources Required ¹ | Sources of Income (in Millions of Dollars) | | | | | Other ⁶ |
|---------|---------------------------------------|--|--------------------|------|-------|------|--------------------|
| | | (1) | (2) | (3) | (4) | (5) | |
| 1972-73 | 283 | 116.0 | 116.0 ⁷ | 1.0 | 40.0 | 10.0 | |
| 1973-74 | 363 | 156.8 | 128.3 | 1.0 | 56.9 | 20.0 | |
| 1974-75 | 384 | 174.8 | 116.6 | 1.0 | 70.6 | 21.0 | |
| 1975-76 | 402 | 180.5 | 97.2 | 17.0 | 85.3 | 22.0 | |
| 1976-77 | 421 | 198.7 | 85.2 | 17.0 | 97.1 | 23.0 | |
| 1977-78 | 440 | 221.5 | 73.8 | 17.0 | 103.7 | 24.0 | |
| 1978-79 | 460 | 235.3 | 78.4 | 17.0 | 104.3 | 25.0 | |
| 1979-80 | 481 | 249.8 | 83.2 | 17.0 | 105.0 | 26.0 | |
| 1980-81 | 503 | 265.0 | 88.3 | 17.0 | 105.7 | 27.0 | |

¹ Projected education and general expenditures. Same methodology as table 37, footnote 1, except an annual price level increase of 3.0 percent was utilized to account for a projected increase in efficiency.

² Column (2) minus columns (4) through (7).

³ As proposed, reflects funding shifts from 1973-74 through 1977-78.

⁴ Assumes \$16 million of Federal institutional annual aid beginning 1975-76.

⁵ Assumes establishment of SUNY-level tuition rates at the senior colleges beginning with the freshmen of 1973-74. Assumes that tuition and fee schedule for nonmatriculants will remain the same.

⁶ Assumes increase of 3.5 percent per year (price level increase).

⁷ Assumes that \$12.5 million of State appropriations are needed to match increase in city appropriations.

Table 37. Projected State Aid to Nonpublic Institutions
for the Years 1972-73 to 1980-81

| (In Millions of Dollars) | | | | |
|--------------------------|-------------------------------|---|---|--|
| Year | Bundy Program ¹ | Health Professions Education Programs ¹ | Higher Education Opportunity Program | Total Aid to Nonpublic Institutions |
| (1) | (2) | (3) | (4) | (5) |
| 1972-73 | 32.9 ¹ | 15.2 | 6.8 | 54.9 |
| 1973-74 | 45.2 | 16.0 | 9.1 | 70.3 |
| 1974-75 | 46.2 | 10.0 | 10.0 | 66.2 |
| 1975-76 | 47.3 | 8.0 | 11.0 | 66.3 |
| 1976-77 | 48.1 | 8.0 | 12.0 | 68.1 |
| 1977-78 | 49.0 | 8.0 | 13.0 | 70.0 |
| 1978-79 | 49.8 | 7.0 | 14.0 | 70.8 |
| 1979-80 | 50.7 | 7.0 | 15.0 | 72.7 |
| 1980-81 | 51.5 | 7.0 | 16.0 | 74.5 |

¹ Assumes implementation of proposed increase in Bundy program beginning in 1973-74. Projected aid estimated by multiplying projected degrees conferred by private institutions by new payment schedule and adjusting for noneligible institutions.

² Includes aid to private medical and dental schools administered by the State University, aid to medical school administered by the Education Department, and aid to nursing schools.

³ Includes \$2.7 million appropriation for Polytechnic Institute of Brooklyn.

Table 38. Projected State Support of Student Aid Programs for the Years 1972-73 to 1980-81

| | (In Millions of Dollars) | | | | | | | | | |
|---|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| | 1972-73 ¹ | 1973-74 | 1974-75 | 1975-76 | 1976-77 | 1977-78 | 1978-79 | 1979-80 | 1980-81 | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | |
| <i>Total Student Aid Programs</i> | 85.9 | 129.5 | 159.8 | 208.9 | 219.0 | 225.4 | 229.6 | 233.9 | 237.9 | |
| Scholar Incentive | 53.0 | 90.3 | 114.6 | 161.6 | 169.4 | 175.0 | 178.6 | 182.2 | 185.8 | |
| Private ² | 31.3 | 54.0 | 71.0 | 104.0 | 105.8 | 107.5 | 109.3 | 111.1 | 112.9 | |
| Public ³ | 21.7 | 36.3 | 43.6 | 57.6 | 63.6 | 67.5 | 69.3 | 71.1 | 72.9 | |
| Regents College Scholarships and Fellowships ⁴ | 32.9 | 34.7 | 36.7 | 38.8 | 41.1 | 41.9 | 42.5 | 43.2 | 43.6 | |
| Transfer Incentive Program | — | 4.5 | 8.5 | 9.5 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | |

¹ Adjusted appropriations; includes deficiency request for the 1972-73 fiscal year.

² Assumes that scholar incentive awards to students attending private institutions are increased according to the proposal and that awards for opportunity students be extended to 5 years beginning in 1973-74.

³ Includes the State University scholarship program. State appropriations for this program were \$2.1 million in 1972-73.

⁴ Assumes: (1) continuation of the present scholar incentive schedule and the State University scholarship program, (2) initiation of scholar incentive payments to students attending The City University and community colleges under the New York City Board of Higher Education beginning with the freshman class in 1973-74, (3) elimination of the requirement that the initial \$200 tuition be payable by the student beginning in 1973-74, and (4) extension of scholar incentive awards for opportunity students to 5 years.

⁵ Assumes the proposed annual increase in the number of Regents college scholarships awarded (to 10 percent of the high school graduates).

Table 39. Projected State Support of Higher Education in New York State for the Years 1972-73 to 1980-81

| (1) | (In Millions of Dollars) | | | | | | | | | |
|--|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|------|
| | 1972-73 | 1973-74 | 1974-75 | 1975-76 | 1976-77 | 1977-78 | 1978-79 | 1979-80 | 1980-81 | (10) |
| Total State Support | 786.7 | 960.8 | 1,062.4 | 1,126.1 | 1,213.0 | 1,303.2 | 1,383.7 | 1,470.3 | 1,556.9 | |
| State University ¹² | 433.3 | 495.6 | 542.5 | 561.2 | 600.4 | 639.1 | 678.7 | 720.2 | 752.6 | |
| Community Colleges ³ | 89.3 | 100.0 | 110.1 | 99.8 | 117.0 | 137.0 | 158.7 | 182.7 | 205.5 | |
| City University ⁴ | 116.0 | 156.8 | 174.8 | 180.5 | 198.7 | 221.5 | 235.3 | 249.8 | 265.0 | |
| Private Colleges and Universities ⁵ | 54.9 | 70.3 | 66.2 | 66.3 | 68.1 | 70.0 | 70.8 | 72.7 | 74.5 | |
| Student Aid ⁶ | 85.9 | 129.5 | 159.8 | 208.9 | 219.0 | 225.4 | 229.6 | 233.9 | 237.9 | |
| Other ⁷ | 6.3 | 8.6 | 9.0 | 9.4 | 9.8 | 10.2 | 10.6 | 11.0 | 11.4 | |

¹ Includes \$11.7 million for urban centers and cooperative college centers.

² See table 32, column 3 and footnote.

³ See table 35, column 3.

⁴ See table 36, column 3.

⁵ See table 37, column 5.

⁶ See table 38, row 1.

⁷ Includes the New York Network, the Einstein-Schweitzer Chairs, and the administrative offices for higher and professional education.

Table 40. State Support of Higher Education as a Percent of New York State Revenues for the Years 1970-71 to 1980-81

| (In Millions of Dollars) | | | |
|-------------------------------|--|---|---|
| | New York State Revenues ¹ | State Support of Higher Education ² | Higher Education Support as a Percent of Revenues |
| (1) | (2) | (3) | (4) |
| 1970-71 | 6,116 | 730.0 | 11.93 |
| 1971-72 | 6,812 | 773.1 | 11.35 |
| 1972-73 | 7,844 | 786.7 | 10.03 |
| 1970-71 to 1972-73 Average | — | — | 11.10 |
| 1973-74 | 8,460 | 960.8 | 11.36 |
| 1974-75 | 9,030 | 1,062.4 | 11.77 |
| 1975-76 | 9,675 | 1,126.1 | 11.64 |
| 1976-77 | 10,340 | 1,213.0 | 11.73 |
| 1977-78 | 10,968 | 1,303.2 | 11.88 |
| 1978-79 | 11,595 | 1,383.7 | 11.93 |
| 1979-80 | 12,223 | 1,470.3 | 12.03 |
| 1980-81 | 12,850 | 1,556.9 | 12.12 |

¹ Source of 1972-73 to 1976-77 data, "Five-Year Projection of Revenues and Expenditures, General Fund, State of New York, 1972-73 through 1976-77," director of the budget, March 1, 1972. Source of 1977-78 data, estimated based on a linear regression equation of tax revenues on population.

² See table 39, row 1.

Appendix B

Public and Private Medical and Dental Schools in New York State

Medical

Public

State University of New York at Buffalo Health Sciences Center
State University of New York Downstate Medical Center
State University of New York at Stony Brook Health Sciences Center
State University of New York Upstate Medical Center

Private

Albany Medical College
Columbia University—College of Physicians and Surgeons
Cornell University Medical College
Mt. Sinai School of Medicine
New York Medical College
New York University Medical School
Rochester Medical College
Yeshiva University—Albert Einstein College of Medicine

Dental

Public

State University of New York at Buffalo Health Sciences Center
State University of New York at Stony Brook Health Sciences Center

Private

Columbia University—School of Dentistry
New York University Dental School

Appendix C

Planning Guidelines for Academic Libraries

(as recommended by the Regents Advisory Committee on Long-Range Planning for Academic Libraries in New York State)

I. Collections

A. 4-Year Colleges and Universities

It is recommended that the formula from the State of Washington study¹ be employed and modified to include an increment for each academic department offering undergraduate courses or programs. The increment recommended by the Clapp-Jordan Formula² is suggested as the quantity to be included in the formula for this component.

The recommended formula would call for a book collection as follows:

| | <u>Units</u> |
|--|--------------|
| Basic collection | 85,000 |
| Allowance per FTE faculty | 100 |
| Allowance per FTE student | 15 |
| Allowance per subject field (undergraduate) | 335 |
| Allowance per master's field when no doctorate is offered in field | 6,100 |
| Allowance per master's field when doctorate is offered in field | 3,050 |
| Allowance per doctoral field | 24,050 |

¹ Interinstitutional Committee of Business Officers, University of Washington, Washington State University, etc. "A Model Budget Analysis for Program 05 Libraries," March 1970.

² Verner W. Clapp and Robert T. Jordan, "Quantitative Criteria for Adequacy of Academic Library Collections," *College and Research Libraries*, September 1965, pp. 371-380.

Add a minimum number of acquisitions per year equal to 5 percent of the estimated number of units of library resources held at the start of each fiscal year

Subtract deletions from the collection based on the percentage ratio of deletions to total holdings experienced in the most recent actual year up to a maximum of 3 percent per year

B. 2-Year Colleges

For 2-year colleges, the committee recommends the application of the Clapp-Jordan formula modified by (1) an increase in the size of the basic collection proportional to that adopted in the State of Washington study, and (2) a provision for annual growth and deletions as included in the State of Washington study. The committee further recommends that the Clapp-Jordan provision for "subject field of study" be extended to include an increment for each such field in the curriculum. It is believed that this will allow sufficient flexibility to make the formula applicable to 2-year curriculums of all types. The Clapp-Jordan formula for 2-year colleges, as modified, would call for a book collection of the following quantities:

| | <u>Units</u> |
|--|--------------|
| To a basic collection, viz: | |
| 1. A collection to support a 2-year general education or liberal arts program | 28,000 |
| Add for each of the following as indicated: | |
| 2. Faculty member (FTE) | 50 |
| 3. Student (FTE) | 5 |
| 4. Subject field of study (i.e., number of academic departments, programs, etc.) | 165 |
| 5. A minimum number of acquisitions each year equal to 5 percent of the estimated number of units of library resources held at the start of each fiscal year | |
| Subtract for the following: | |
| 6. Deletions based on the percentage of deletions to total holdings experienced in the most recent actual year up to a maximum of 3 percent per year | |

Appendix D

Planning Standards for Higher Education Facilities

Amendment to the Regents Statewide Plan, 1968, adopting planning standards for higher education facilities.

I. Classroom and Lecture Hall Standards

| | Number of Stations | Use Hrs./ Week | % of Station Utilization | Net Sq. Ft. Per Station | Net Sq. Ft. per WSH |
|--------------|--------------------|----------------|--------------------------|-------------------------|---------------------|
| Classroom* | 8-74 | 30 | 60% | 16 | .89 |
| Lecture Hall | 75 & up | 20 | 60% | 12 | 1.00 |

* Includes seminar rooms.

II. Class Laboratory Standards

Note: NASF includes only the Class Laboratory (or Teaching Laboratory) and its immediate support space (Preparation and Storage Room).

| | NASF/ Station | NASF/ WSH | (Based on 24 hr. use per week & 80% station utilization.) |
|--------------------------|---------------|-----------|---|
| <i>Life Science</i> | | | |
| Biological Sciences | 68 | 3.54 | |
| Agricultural Sciences | 160 | 8.33 | |
| Health Sciences | Under Study | | |
| <i>M.C.P.E. Sciences</i> | | | |
| Mathematical Sciences | 40 | 2.08 | |
| Computer Sciences | 40 | 2.08 | |
| Physical Sciences | 68 | 3.54 | |
| Engineering Sciences | | | |
| Engineering Science | Under Study | | |
| Ceramic Engineering | Under Study | | |

| | | |
|-------------------------------------|--------------------|------|
| Chemical Engineering | Under study | |
| Electrical Engineering | 65 | 3.38 |
| Civil Engineering | 112 | 5.83 |
| Mechanical Engineering | 160 | 8.33 |
| Industrial Engineering | 160 | 8.33 |
| <i>Behavioral Sciences</i> | | |
| Psychology | 45 | 2.34 |
| Social Sciences | | |
| Anthropology | 50 | 2.60 |
| Economics | 40 | 2.08 |
| Geography | 68 | 3.54 |
| History | 32 | 1.66 |
| Sociology | 40 | 2.08 |
| <i>Humanities</i> | | |
| Fine & Performing Arts | | |
| Art Studios | 62 | 3.23 |
| Drama | 32 | 1.66 |
| Theater—Radio and TV | 100 | 5.21 |
| Dance | 100 | 5.21 |
| Music | 50 | 2.60 |
| Speech | 40 | 2.08 |
| Letters | | |
| Languages & Literature | 40 | 2.08 |
| <i>Professions</i> | | |
| Administration (Business) | 40 | 2.08 |
| Education General | 40 | 2.08 |
| Education Art | 50 | 2.60 |
| Education Music | 50 | 2.60 |
| Education Vocational | 40 | 2.08 |
| Architecture | 100 | 5.21 |
| Home Economics | 100 | 5.21 |
| Social Work | 40 | 2.08 |
| Library Science | 40 | 2.08 |
| <i>Technical-Vocational</i> | | |
| Agricultural | 100 | 5.21 |
| Apparel Design | 100 | 5.21 |
| Business Technologies | 40 | 2.08 |
| Construction Technologies | 100 | 5.21 |
| Engineering & Industrial | | |
| Tech. | 100 | 5.21 |
| Graphic Arts Technologies | 100 | 5.21 |

| | | |
|--------------------------------|--------|-----------|
| Health Technologies | 90 | 4.69 |
| Public Service Technologies | 40-90* | 2.08-4.69 |
| Transportation Technologies | 100 | 5.21 |
| Vocational | 160 | 8.33 |
| * Under Study | | |

III. *Library Standards*

A. Stations or Study Spaces

- 1) Number of stations—institutional program decision
- 2) Size of stations—25 net assignable sq. ft. each

B. Stack Space

| | | |
|--------|-----------------|----------------------------|
| First | 150,000 volumes | 0.1 NASF per bound volume |
| Second | 150,000 volumes | 0.09 NASF per bound volume |
| Next | 300,000 volumes | 0.08 NASF per bound volume |

All Additional Volumes

C. Service Space

25 percent of total station and stack space

IV. *Academic Office Standards*

One hundred and sixty square feet allocated per each departmental full-time member (which encompasses the total departmental office space including chairman's office, secretarial and clerical offices, conference rooms, filing, work and storage space; it does not include research and technical assistants and part-time faculty). For each full-time equivalent teaching member, this allocation is apportioned as follows:

- 120 sq. ft. of office space
- 40 sq. ft. of supporting services

Appendix E

Resolutions of the Associated Colleges and Universities of the State of New York

Resolutions adopted by the Executive Committee of the Associated Colleges and Universities of the State of New York, September 30, 1971, regarding regional arrangements for higher education.

1. That all here present support the concept that considers all higher educational institutions—both public and private—as a single resource committed to the common goal of meeting the higher educational needs of the State of New York.
2. In implementing this concept, it is resolved that Planning Councils be set up by regions with executive representatives from public and private institutions and the State Education Department.
 Consideration should also be given to maintaining close consultation with representatives of local and state governmental fiscal officers.
 Although the first of these Councils should be the Council for the Metropolitan New York City area, consideration should also be given to the early establishment of Councils in upstate New York.
 These Regional Planning Councils will be responsible for coordinating programs and facilities development in public and private institutions and for achieving optimum use of public and private resources in the region.
 It is understood that the Board of Regents, in meeting the responsibility for development of a statewide plan and for integrating regional plans, will have authority over the Regional Planning Councils and will be the channel for seeking legislation and/or appropriations as required to implement recommendations of the Councils.
3. It is resolved that close liaison be maintained between the Education Commissioner's Office and the Executive Committee of ACUSNY as the preparation of detailed plans for the structure and operation of the Regional Planning Councils are developed.

4. Special areas of concern, such as engineering and health care, may require special statewide or broader regional attention and may, therefore, be dependent upon the creation of separate structures for the resolution of problems specifically affecting them.
5. In addition to the objective of achieving organizational change and restructuring of institutional relationships in order to achieve the common goal of meeting the higher educational needs of the State, it is further resolved that the Regional Planning Councils should be looked upon as another means of encouraging, through cooperative action, fundamental change and improvement in educational programs within institutions.
6. It is resolved that a program of information sharing concerning state, city and private institutions shall be undertaken to enrich understanding by ACUSNY members of one another's problems and plans. It is intended that such a process will lead to a sharing of programs and plans during the preparation of Master Plans rather than after their submission.

It is further resolved that this be the agenda for another meeting such as the present one at an early date.

7. In carrying out the purposes of these resolutions, it is essential that information as to trends and developments in the professions, business and occupational areas as well as anticipated changes in manpower needs be available to Regional Planning Councils through agencies operating at the State level. Such information should be organized by the State Education Department according to regions and also integrated at the State level for the purpose of coordinating regional plans and ultimately for determining the Statewide Master Plan. The Regional Planning Councils should employ the information provided by the central state agencies to develop and maintain data banks of information on manpower needs and developments as well as inventories of all institutional resources. Such data banks will serve as the basis for drawing up regional plans and for their continuous updating.

Appendix F

Composition of the State University of New York

The State University of New York consists of 72 units:

1. Four university centers offering a full spectrum of undergraduate and graduate work through the doctorate;
2. Two independent health sciences centers offering programs in the health services ranging from associate degrees through the M.D. and Ph.D., in addition to the health centers at the University Centers at Buffalo and Stony Brook;
3. Fourteen colleges of arts and science offering liberal arts and teacher education programs through the master's degree;
4. Five statutory schools operating through contracts with Cornell and Alfred Universities, all offering graduate work;
5. The specialized colleges of Forestry, Maritime, and Optometry;
6. Six agricultural and technical colleges offering associate degrees and shorter programs in technical subjects;
7. Thirty-eight community colleges which are operated by local sponsors and which receive State aid for operating and capital costs. Each community college has its own local nine-member board of trustees. Four of these trustees are appointed by the Governor and five by the local legislative board of the sponsoring community except for the nine community colleges in New York City. The board of education appoints the local trustees for the Fashion Institute of Technology, and the Board of Higher Education appoints the local trustees for the other eight.

Appendix G

Classification of Public Colleges and Universities

State University of New York

University Centers

Albany
 Binghamton
 Buffalo
 Stony Brook

*University Colleges*³

Brockport
 Buffalo
 Cortland
 Empire State
 Fredonia
 Geneseo
 Herkimer-Rome-Utica
 New Paltz
 Old Westbury
 Oneonta
 Oswego
 Plattsburgh
 Potsdam
 Purchase

Health Sciences Centers

Buffalo
 Downstate
 Stony Brook
 Upstate

³ Known as Arts and Sciences Colleges in SUNY 1972 master plan.

Specialized Colleges

Environmental Science and
Forestry
Maritime
Optometry

Statutory Colleges

Agriculture and Life
Sciences at Cornell
Ceramics at Alfred
Human Ecology at Cornell
Industrial and Labor
Relations at Cornell
Veterinary at Cornell

*2-Year Colleges**Agricultural and Technical
Colleges*

Alfred
Canton
Cobleskill
Delhi
Farmingdale
Morrisville

*2-Year Colleges**Community Colleges*

Adirondack
Auburn
Broome
Clinton County
Columbia-Greene
Community College of the
Finger Lakes
Corning
Dutchess
Erie
Fashion Institute of
Technology
Fulton-Montgomery
Genesee

Herkimer County
 Hudson Valley
 Jamestown
 Jefferson
 Mohawk Valley
 Monroe
 Nassau
 Niagara County
 North Country
 Onondaga
 Orange County
 Rockland
 Schenectady County
 Suffolk County
 Sullivan County
 Tompkins-Cortland
 Ulster County
 Westchester

*Community Colleges in New York City*⁴

Borough of Manhattan
 Bronx
 Hostos
 Kingsborough
 LaGuardia
 New York City
 Queensborough
 Staten Island

The City University of New York

Graduate Center

Senior Colleges

Baruch College
 Brooklyn College
 City College
 Evers College
 Hunter College

⁴ Community colleges sponsored by the New York City Board of Higher Education under the program of the State University of New York.

**John Jay College of
Criminal Justice
Lehman College
Queens College
Richmond College
York College**

Appendix H

Classification of Private Colleges and Universities

Universities

Multiversities

Columbia University
Cornell University
New York University
Syracuse University
University of Rochester

Universities

Adelphi University
Fordham University
Hofstra University
Long Island University
Brooklyn Center
Brooklyn College of
Pharmacy
C. W. Post
Southampton
St. John's University
Yeshiva University

Colleges

College Complexes

Alfred University
Barnard College
Canisius College
Colgate University
D'Youville College
Elmira College
Hamilton College

Hartwick College
Hobart and William Smith
Colleges
Iona College
Ithaca College
LeMoyne College
Manhattan College
Manhattanville College
New School for Social
Research
Niagara University
Pace College
Russell Sage College⁵
St. Bonaventure University
St. Lawrence University
Sarah Lawrence College
Skidmore College
Union College
Vassar College
Wagner College
Wells College

Colleges

Bard College
Briarcliff College
College of Mount St.
Vincent
College of New Rochelle
College of St. Rose
College of White Plains⁶
Dominican College of
Blauvelt
Dowling College
Eisenhower College
Finch College
Friends World College
Houghton College
Keuka College

⁵ Includes Junior College of Albany.

⁶ Formerly called Good Counsel College.

King's College (The)
 Kirkland College
 Ladycliff College
 Marist College
 Marymount College
 Marymount Manhattan
 College
 Medaille College
 Mercy College
 Molloy College
 Mount St. Mary College
 Nazareth College
 Notre Dame College of
 Staten Island ¹
 Roberts Wesleyan College
 Rosary Hill College
 St. Francis College
 St. John Fisher College
 St. Joseph's College
 St. Thomas Aquinas College
 Siena College
 Touro College
 Utica College
 Wadhams Hall

Engineering and Technical Schools

Clarkson College of
 Technology
 Cooper Union
 New York Institute of
 Technology
 Polytechnic Institute of
 Brooklyn
 Pratt Institute
 Rensselaer Polytechnic
 Institute
 Rochester Institute of
 Technology

¹ Absorbed by St. John's University, fall 1970.

**Webb Institute of Naval
Architecture**

Specialized Colleges

Albany Law School
Bank Street College
Brooklyn Law School
College of Insurance
Juilliard School
Manhattan School of Music
Mannes College of Music
Mills College of Education
New York Law School
Parsons School of Design ⁸
Teachers College, Columbia
University

Health Centers

Albany College of
Pharmacy
Albany Medical College
College of Pharmaceutical
Science, Columbia
University
Mount Sinai School of
Medicine
New York College of
Podiatric Medicine ⁹
New York Medical College
Rockefeller University

**Seminaries and Religious
Training Colleges**

Brentwood College ¹⁰

⁸ Became an affiliate of the New School for Social Research in February 1970.

⁹ Formerly called M. J. Lewi College of Podiatry.

¹⁰ Closed summer 1971.

Capuchin Theological
Seminary ¹¹
Cathedral College of the
Immaculate Conception
Colgate Rochester-Bexley
Hall-Crozer Divinity
School
General Theological
Seminary
Hebrew Union College
Holy Trinity Orthodox
Seminary
Immaculate Conception
Seminary
Jewish Theological
Seminary of America
Maryknoll Seminary
Mount St. Alphonsus
Seminary
New York Theological
Seminary
Nyack College
Passionist Monastic
Seminary
Rabbi Isaac Elchanan
Seminary
Rogers College ¹²
St. Anthony-on-Hudson
St. Bernard's Seminary
St. John Vianney Seminary
St. Joseph's Seminary and
College
St. Vladimir's Orthodox
Seminary
Union Theological Seminary
Woodstock College

¹¹ Closed June 1971.

¹² Formerly called Mary Rogers College.

2-Year Colleges

General Programs (Liberal Arts/Teacher Education)

Bennett College
 Cazenovia College
 Concordia College ¹³
 Elizabeth Seton College
 Five Towns College ¹⁴
 Harriman College
 Hilbert College
 Maria College of Albany
 Maria Regina College
 Mater Del College
 Packer Collegiate Institute ¹⁵
 Trocaire College
 Villa Maria College of
 Buffalo

Specialized

Academy of Aeronautics
 College for Human Services
 Culinary Institute of
 America ¹⁶
 LaSalette Seminary
 Our Lady of Hope
 Seminary ¹⁷
 Paul Smith's College of
 Arts and Sciences
 Saint Clare College ¹⁸
 Voorhees Technical
 Institute ¹⁹

¹³ Became a 4-year institution, September 1972.

¹⁴ Chartered to open September 1972.

¹⁵ Closed June 1972.

¹⁶ Moved to New York State in 1972.

¹⁷ Closed 1971.

¹⁸ Closed 1971.

¹⁹ Closed July 1971; became a branch campus of New York City Community College.

Appendix I

Listing of Proprietary Schools Authorized by the Regents to Grant Degrees²⁰

- Albany Business College
(Albany)
- American Academy of
Dramatic Arts
(New York City)
- (The) Berkeley School
(White Plains)
- Berkeley-Claremont School
(Hicksville, Long Island)
- Berkeley-Claremont School
(New York City)
- Bryant and Stratton
Business Institute
(Buffalo)
- Central City Business
Institute (Syracuse)
- (The) Collegiate Institute,
Inc. (New York City)
- Interboro Institute
(New York City)
- Jamestown Business College
(Jamestown)
- Katharine Gibbs School
(New York City)
- Laboratory Institute of
Merchandising
(New York City)

²⁰ All the schools listed have been authorized to grant the associate in occupational studies degree except The School of Visual Arts which can award a bachelor of fine arts degree. (As of 9/28/72.)

- Monroe Business Institute—
Fordham School
(New York City)
- Olean Business Institute
(Olean)
- Powelson Business Institute
(Syracuse)
- R.C.A. Institutes
(New York City)
- Taylor Business Institute
(New York City)
- Tobe-Coburn School for
Fashion Careers, Inc.
(New York City)
- Utica School of Commerce
(The) Wood School
(New York City)
- (The) School of Visual Arts
(New York City)

Appendix J

Related Readings and Studies

1. Academy for Educational Development. National Planning for Education. Washington, D.C.: U.S. Government Printing Office. 1970.
2. ———. State Planning for Higher Education. Washington, D.C.: The Academy. 1969.
3. American Council on Education. College and University Business Administration; *rev. ed.* Washington, D.C.: The Council. 1968.
4. ———. External Degrees: An Interim Report. Washington, D.C.: The Council. February 1971.
5. ———. Perspectives on Campus Tensions: Papers Prepared for the Special Committee on Campus Tensions. Washington, D.C.: The Council. September 1970.
6. Ashby, Eric. Any Person, Any Study: An Essay on American Higher Education. New York: McGraw-Hill. 1971. Prepared for the Carnegie Commission on Higher Education.
7. Astin, A. W. Some New Directions for Higher Education: A Research Perspective. Washington, D.C.: American Council on Education. 1970.
8. Astin, H. S. The Woman Doctorate in America: Origins, Career, and Family. New York: Russell Sage Foundation. 1969.
9. Berdahl, R. O. Statewide Coordination of Higher Education. Washington, D.C.: American Council on Education. 1971.
10. Berg, Ivar. Education and Jobs: The Great Training Robbery. New York: Praeger. 1970.
11. Biernbaum, William. New Experimental Curriculum and Organization at Staten Island Community College. Staten Island, N.Y.: Staten Island Community College. 1970.
12. Booz, Allen and Hamilton, Inc. Problems in University Library Management: A Study Conducted by Booz, Allen and Hamilton, Inc. for the Association of Research Libraries

- and the American Council on Education. Washington, D.C.: The Association of Research Libraries. 1970.
13. Bowen, Frank. *Necessary Next Steps*. Washington, D.C.: American Council on Education. 1970.
 14. Bowen, H. R. *The Finance of Higher Education*. New York: McGraw-Hill. 1968. Prepared for the Carnegie Commission on Higher Education.
 15. Bowen, W. G. *The Economics of the Major Private Universities*. New York: McGraw-Hill. 1968. Prepared for the Carnegie Commission on Higher Education.
 16. Bowles, Samuel. *Planning Educational Systems for Economic Growth*. Cambridge, Mass.: Harvard University Press. 1969.
 17. Buchanan, James & Nicos Develotoglov. *Academia in Anarchy*. New York: Basic Books. 1970.
 18. Burkhardt, R. C., *ed.* *The Assessment Revolution: New Viewpoints for Teacher Evaluation*. Albany, N.Y.: The University of the State of New York Press. 1970.
 19. Burnett, H. J. *Interinstitutional Cooperation in Higher Education*. Corning, N.Y.: College Center of the Finger Lakes. 1970.
 20. Caffey, John, *ed.* *The Future Academic Community: Continuity and Change*. Washington, D.C.: American Council on Education. 1969.
 21. Cannon, W. B. *New Federal Rationale and Programs in Higher Education*. Chicago, Ill.: University of Chicago. 1970.
 22. Carnegie Commission on Higher Education. *The Capital and the Congress: State Responsibility for Post-Secondary Education*. Berkeley, Calif.: The Commission. June 10, 1970.
 23. ———. *A Chance to Learn: An Action Agenda for Equal Opportunity in Higher Education*. New York: McGraw-Hill. March 1970.
 24. ———. *From Isolation to Mainstream*. New York: McGraw-Hill. February 1971.
 25. ———. *Higher Education and the Nation's Health: Policies for Medical and Dental Education*. New York: McGraw-Hill. October 1970.
 26. ———. *Less Time, More Options: Education Beyond the High School*. New York: McGraw-Hill. December 1970.

27. ———. *The More Effective Use of Resources: An Imperative for Higher Education*. New York: McGraw-Hill. June 1972.
28. ———. *New Students and New Places*. New York: McGraw-Hill. 1971.
29. ———. *The Open-Door Colleges: Policies for Community Colleges*. New York: McGraw-Hill. 1970.
30. ———. *Quality and Equality: New Levels of Federal Responsibility for Higher Education*. New York: McGraw-Hill. December 1968.
31. ———. *Quality and Equality: Revised Recommendations, New Levels of Federal Responsibility for Higher Education*. New York: McGraw-Hill. June 1970. (A supplement to the 1968 report.)
32. Cartter, A. M. "Scientific Manpower for 1970-85." *Science*. Vol. 172. 1971.
33. Cheit, Earl F. *The New Depression in Higher Education: A Study of Financial Conditions at 41 Colleges and Universities*. New York: McGraw-Hill. 1970. Prepared for the Carnegie Commission on Higher Education.
34. Cohen, A. C. *Human Service Institutes: An Alternative for Professional Higher Education*. New York: College for Human Services. March 1970.
35. ———. *Women and Higher Education: Recommendation for Change*. New York: College for Human Services. August 1970.
36. *The College Center of the Finger Lakes. Interinstitutional Cooperative Arrangements in Higher Education in New York State*. Albany, N.Y.: University of the State of New York Press. 1970.
37. *College Entrance Examination Board. Manual for Financial Aid Officers*. Princeton, N.J.: The Board. 1970.
38. *Commission on Independent Colleges and Universities. 1970 Progress Report to the Board of Regents of the State of New York*. New York: The Commission. 1970.
39. "Country's No. 1 Health Problem: An Interview with Top Presidential Advisor." *U.S. News & World Report*. LXX:68-73. February 23, 1970.
40. Cross, K. P. *The Role of the Junior Colleges in Providing Post-Secondary Education for All*. Berkeley, Calif.: Center

- for Research and Development in Higher Education, University of California. 1969.
41. ———. *Beyond the Open Door*. San Francisco, Calif.: Jossey-Bass, Inc. 1971.
 42. Deitrick, J. E. *Report on the Financing of the Private Medical Schools of New York State*. Unpublished paper for the Associated Medical Schools of Greater New York. February 13, 1970.
 43. ———. "To Meet the Shortage of M.D.'s" *The New York Times*. Letters to the Editor. March 28, 1972.
 44. Driver, Christopher. *The Exploding University*. New York: Bobbs-Merrill, Inc. 1972.
 45. Dupuy, T. N. *Ferment in College Libraries: The Impact of Information Technology: A Report to the Trustees of the College of the Potomac*. Washington, D.C.: Communications Service Corporation. 1968.
 46. ———. *Modern Libraries for Modern Colleges: Strategies for Research, Design and Development*. Washington, D.C.: Communications Service Corporation. 1968.
 47. Education Policy Research Center. *Notes on the Future of Education*. Syracuse, N.Y.: The Center. 1970.
 48. Educational Facilities Laboratory. *The Impact of Technology on the Library Building*. New York: The Laboratory. 1967.
 49. Erikson, E. H. *Identity, Youth and Crisis*. New York: Norton. 1968.
 50. Ertell, Merton W. *Interinstitutional Cooperation in Higher Education*. Albany, N.Y.: University of the State of New York Press. June 1957.
 51. Etzioni, Amitai & Murray Milner. *Higher Education in an Active Society: A Policy Study*. Washington, D.C.: Bureau of Social Science Research Inc. March 1970.
 52. Eurich, A. C., ed. *Campus 1980: The Shape of the Future in American Higher Education*. New York: Delacorte Press. 1968.
 53. Farmer, James. *Why Planning, Programming, Budgeting Systems for Higher Education?* Boulder, Colo.: Western Interstate Commission for Higher Education. 1970.
 54. Fein, Rashi & Gerald Weber. *Financing Medical Education: An Analysis of Alternative Policies and Mechanisms*. New York: McGraw-Hill. 1971. Prepared for the Carnegie Commission on Higher Education.

55. Folger, J. K., H. S. Astin, & H. E. Boyer. *Human Resources and Higher Education: Staff Report of the Commission on Human Resources and Advanced Education*. New York: Russell Sage Foundation. 1970.
56. Froomkin, Joseph. *Aspirations, Enrollments, and Resources: The Challenge to Higher Education in the Seventies*. Washington, D.C.: U.S. Government Printing Office. 1970.
57. Gaff, Jerry G. & Associates. *The Cluster College*. San Francisco, Calif.: Jossey-Bass. 1970.
58. Glenny, L. A. & others. *Coordinating Higher Education for the '70's: Multi-campus and Statewide Guidelines for Practice*. Berkeley, Calif.: The Center for Research and Development in Higher Education, University of California. 1971.
59. Glenny, L. A. & G. B. Weathersby, eds. *Statewide Planning for Postsecondary Education: Issues and Design*. Boulder, Colo.: National Center For Higher Education Management Systems at WICHE. September 1971.
60. Gould, Samuel B. *Today's Academic Condition*. Hamilton, N.Y.: Colgate University Press. 1970.
61. Greeley, A. M. *From Backwater to Mainstream: A Profile of Catholic Higher Education*. New York: McGraw-Hill. 1969. Prepared for the Carnegie Commission on Higher Education.
62. Hansen, W. L. & B. A. Weisbrod. *Benefits, Costs and Finance of Public Higher Education*. Chicago, Ill.: Markham Publishing Company. 1969.
63. Harclerood, F. F., ed. *Issues of the Seventies: The Future of Higher Education*. San Francisco, Calif.: Jossey-Bass. 1970.
64. Hefferlin, J. L. *Dynamics of Academic Reform*. San Francisco, Calif.: Jossey-Bass. 1969.
65. Howard, L. C., ed. *Interinstitutional Cooperation in Higher Education*. Milwaukee, Wis.: Institute of Human Relations, University of Wisconsin. 1967.
66. International Institute for Educational Planning. *Manpower Aspects of Educational Planning: Problems for the Future*. Paris, France: UNESCO. 1968.
67. Jencks, Christopher & David Riesman. *The Academic Revolution*. Garden City, N.J.: Doubleday. 1968.
68. Johnson, C. B. & W. G. Kastenmeyer, eds. *Management Infor-*

- mation Systems In Higher Education: The State of the Art. Durham, N.C.: Duke University Press. 1969.
69. Joughlin, Louis G., *ed.* Academic Freedom and Tenure: A Handbook of the American Association of University Professors. Madison, Wis.: University of Wisconsin Press. 1967.
 70. Knowles, Malcolm S. Higher Adult Education in the United States: The Current Picture, Trends and Issues. Washington, D.C.: American Council on Education. 1969.
 71. Kruytbosch, C. E. & S. L. Messinger, *eds.* The State of the University: Authority and Change. Beverly Hills, Calif.: Sage Publications. 1970.
 72. Laurin Hyde Associates. Planning Professional Social Work Education in New York State. Albany, N.Y.: University of the State of New York Press. 1968.
 73. Lawrence, B., Weathersby G., & Patterson V., *eds.* The Outputs of Higher Education: Their Identification, Measurement and Evaluation. Boulder, Colo.: Western Interstate Commission for Higher Education. 1970.
 74. Lee, Eugene & Frank Bowen. The Governance of the Multi-campus University. New York: McGraw-Hill. 1971.
 75. Lieberman, Myron. "Professors Unite!" *Harpers*. Vol. 243:64. October 1971.
 76. Martin, W. B. Conformity: Standards and Change in Higher Education. San Francisco, Calif.: Jossey-Bass. 1969.
 77. Mayhew, L. B. Arrogance on Campus. San Francisco, Calif.: Jossey-Bass. 1970.
 78. ———. Graduate and Professional Education, 1980: A Survey of Institutional Plans. New York: McGraw-Hill. 1970.
 79. Michigan Council of State College Presidents. Unit Cost Study: Instruction and Departmental Research: A Study for the Public Colleges and Universities in Michigan. The Council. October 1970.
 80. Minter, John & Ben Lawrence, *eds.* Management Information Systems: Their Development and Use in the Administration of Higher Education. Boulder, Colo.: Western Interstate Commission for Higher Education. 1969.
 81. Moore, William, Jr. Against the Odds: The High-Risk Student in the Community College. San Francisco, Calif.: Jossey-Bass. 1970.

82. Mortenson, K. E. (Project Director for the New York State Engineering Educational Resources Study Council) A Study of the Engineering Educational Resources in the State of New York. Albany, N.Y.: University of the State of New York Press. July 1967.
83. National Commission for the Study of Nursing and Nursing Education. "Summary Report and Recommendations." American Journal of Nursing. Vol. 70:279-94. February 1970.
84. New York City, Board of Higher Education. Master Plan of the Board of Higher Education for The City University of New York 1968. New York: The Board. 1968.
85. ———. Master Plan of the Board of Higher Education for The City University of New York 1968: First Revision, 1969. New York: The Board. 1969.
86. ———. Master Plan of the Board of Higher Education for The City University of New York 1968: First Revision, 1969: Part II: Amendment to Implement Open Admissions. New York: The Board. 1969.
87. ———. Master Plan of the Board of Higher Education for The City University of New York 1968: Second Revision, 1970. New York: The Board. 1970.
88. New York State Committee on Medical Education. Education for the Health Professions: A Report to the Governor and Board of Regents. Albany, New York: University of the State of New York Press. June 1963.
89. New York State, Council of Economic Advisors. Annual Report: 1971. New York: The Council. *n.d.*
90. New York State, Department of Labor. Manpower Directions —New York State 1965-1975. Albany, N.Y.: The Department. 1968.
91. (New York State) Governor's Steering Committee on Social Problems. Report on Health and Hospital Services and Costs. New York: The Committee. June 1971.
92. New York State, Office of Planning Coordination. Demographic Projections for New York State Counties to 2020 A.D.[sic] Albany, N.Y.: The Office. 1968.
93. ———. Demographic Projections for 0-24 Age Group, by One-Year Age Intervals to 1995 A.D.[sic] Albany, N.Y.: The Office. 1969.

94. ———. *New York State Economic Outlook for the Seventies*. Albany, N.Y.: The Office. 1969.
95. (New York State) Select Committee on the Future of Private and Independent Higher Education in New York State. *New York State and Private Higher Education*. Albany, N.Y.: The University of the State of New York Press. 1968.
96. New York (State) State University. *Campus Enrollment Growth: Guidelines for the Development of Campus Enrollment Goals for 1969-70 to 1980-81, and for 1985-86*. Albany, N.Y.: The University. 1969.
97. ———. *Creation of the Future: Priorities of Growth and Change: The Master Plan; rev. 1968*. Albany, N.Y.: The University. 1968.
98. ———. *1969 Progress Report and Interim Revision of the Master Plan of 1968*. Albany, N.Y.: The University. 1969.
99. ———. *1970 Progress Report and Interim Revision of the Master Plan of 1968*. Albany, N.Y.: The University. 1970.
100. New York (State) State University, Central Staff Office of Institutional Research. *1970-71 Headcount Enrollment and Full-Time Equivalent Workload Statistics of Credit Course Students*. Albany, N.Y.: The University. June 1971. (Report No. 24.)
101. New York State, Temporary Commission to Study the Causes of Campus Unrest. *The Academy in Turmoil*. Albany, N.Y.: The Commission. February 1970.
102. ———. *Anarchy in the Academy*. Albany, N.Y.: The Commission. March 1971.
103. New York (State) University. *A Directory of College and University Libraries in New York State*. Albany, N.Y.: The University. 1969.
104. ———. *A Directory of Reference and Research Library Resources Systems in New York State*. Albany, N.Y.: The University. 1970.
105. ———. *Federal Legislation and Education in New York State*. Albany, N.Y.: The University. January 1970.
106. ———. *Federal Legislation and Education in New York State*. Albany, N.Y.: The University. January 1971.
107. ———. *Federal Legislation and Education in New York State*. Albany, N.Y.: The University. January 1972.
108. ———. *Major Recommendations of the Regents for Legisla-*

- tive Action 1971. Albany, N.Y.: The University. November 1970.
109. ———. Major Recommendations of the Regents for Legislative Action 1972. Albany, N.Y.: The University. December 1971.
110. ———. The New York College Proficiency Examination Program. Albany, N.Y.: The University. *n.d.*
111. ———. New York State Professional Social Work Manpower: Some Related Characteristics. Albany, N.Y.: The University. 1970.
112. ———. New York State's Higher Education System: Progress and Problems: Background Studies for the Development of New Methods of Financing. Albany, N.Y.: The University. 1972.
113. ———. Open Admissions to Post-Secondary Education: A Statement by the Regents of The University of the State of New York. Albany, N.Y.: The University. 1969.
114. ———. The 1969 Progress Report of the Board of Regents on the Regents Statewide Plan for Expansion and Development of Higher Education 1968. Albany, N.Y.: The University. 1970.
115. ———. The 1970 Progress Report of the Board of Regents on the Regents Statewide Plan for the Expansion and Development of Higher Education 1968. Albany, N.Y.: The University. 1970.
116. ———. The Regents Statewide Plan for the Expansion and Development of Higher Education 1968. Albany, N.Y.: The University. 1968.
117. ———. Rules of the Board of Regents and Regulations of the Commissioner of Education. Albany, N.Y.: The University. 1971.
118. ———. Statements of Policy and Proposed Action by the Regents of The University of the State of New York. Albany, N.Y.: The University.
1. Urban Education. November 1967.
 3. Integration and the Schools. December 1969.
 4. Continuing Education. May 1969.
 5. International Dimensions of Education. January 1970.
 7. Vocational Rehabilitation. August 1970.

8. Library Service. October 1970.
 9. Drug Education. December 1970.
 10. Environmental Education. March 1971.
 11. Occupational Education. May 1971.
 12. Reading. July 1971.
 13. Financing Higher Education Needs in the Decade Ahead. January 1972.
 14. Equal Opportunity for Women. April 1972.
 15. Minority Access to and Participation in Post-Secondary Education. May 1972.
119. ———. Teacher Education Programs and Certification Policies. Albany, N.Y.: The University. 1970.
 120. New York (State) University, Bureau of College Evaluation. Master's Degrees in the State of New York, 1969-70. Albany, N.Y.: The University. 1972.
 121. New York (State) University, Bureau of Research in Higher and Professional Education. Educating Teachers of the Disadvantaged. Albany, N.Y.: The University. 1970.
 122. ———. New York State Dental Manpower Study, by Dr. Henry Wechsler. Albany, N.Y.: The University. Autumn 1971.
 123. ———. The Regents Academic Chair Program. Albany, N.Y.: The University. Autumn 1971.
 124. ———. The Voucher System and Higher Education in New York State. Albany, N.Y.: The University. 1970.
 125. New York (State) University, New York City Regents Advisory Council. A Regional Plan for Higher Education: A Report from New York City. New York: The Council. June 9, 1972.
 126. New York (State) University, Office of Planning in Higher Education. Education Beyond High School: The Regents Planning Bulletin Concerning the Regents Statewide Plan for the Development of Higher Education, 1972. Albany, N.Y.: The University. April 1971.
 127. ———. Higher Education Planning Statistics 1969. Albany, N.Y.: The University. 1970.
 - Volume I-A, Degree-Credit Enrollment: Undergraduate, First Professional, Graduate and First-Time Freshman Data.
 - Volume I-B, Advanced Degree Enrollment by Program.

Volume II, Degrees Awarded.

Volume III, Faculty Rank, Highest Degree Earned, and Mean Salary Data.

Volume IV, Library Collections, Staff and Expenditures.

Volume V, Operational Finances.

Volume VI, Physical Facilities.

Volume VII, Summary.

128. Nicholson, Everard. Success and Admission Criteria for Potentially Successful Risks. Providence, R.I.: Brown University. March 1970.
129. Palola, E. G., T. Lehmann, & W. R. Blischke. Higher Education Design: The Sociology of Planning. Berkeley, Calif.: The Center for Research and Development in Higher Education, University of California. 1970.
130. Paltridge, J. G. Conflict and Coordination in Higher Education. Berkeley, Calif.: Center for Research and Development in Higher Education. 1968.
131. Penrod, K. E. "New Medical Schools; Can They Be Established Quickly at Less Expense?" Journal of the American Medical Association. Vol. 218:571-73. October 25, 1971.
A paper presented (in part) at the 67th Annual Congress on Medical Education; Chicago, Ill.; February 14-15, 1971.
132. Priorities in Higher Education: The Report of the President's Task Force on Higher Education. Washington, D.C.: U.S. Government Printing Office. 1970.
133. Recommendations Adopted by the Executive Committee of the Association of Colleges and Universities of the State of New York. Special session at the Institute of Man and Science, Rensselaerville, New York. August 3-5, 1971.
134. Reeling, G. E. Doctoral Education in New York State: Current Status and Projected Needs. Albany, N.Y.: University of the State of New York Press. 1970.
135. Reeling, G. E. & H. S. Lejda. An Analysis of Faculty Salaries as an Instructional Cost Factor. Jersey City, N.J.: Jersey City State College, Office of Institutional Research. February 1972.
136. Rivlin, Alice. The Role of the Federal Government in Financing Higher Education. Washington, D.C.: The Brookings Institution. 1961.
137. Rosenthal, N. H. College Trained Manpower in New York

- State 1965-1975. Washington, D.C.: Academy for Educational Development. 1968.
138. Schultze, C. L. & Others. *Setting National Priorities: The 1971 Budget*. Washington, D.C.: The Brookings Institution. 1970.
 139. Silberman, C. E. *Crisis in the Classroom: The Remaking of American Education*. New York: Random House. 1970.
 140. Simon, J. G., C. W. Powers & J. P. Gunneman. *The Ethical Investor: Universities and Corporate Responsibility*. New Haven, Conn.: Yale University Press. *n.d.*
 141. Smith, G. K., *ed.* *The Troubled Campus—Current Issues in Higher Education, 1970*. San Francisco, Calif.: Jossey-Bass. 1970.
 142. Spurr, S. H. *Academic Degree Structures: Innovative Approaches: Principles of Reform in Degree Structures in the United States*. New York: McGraw-Hill. 1970.
 143. Tennessee Higher Education Commission. *An Instructional Analysis of Tennessee Public Higher Education, Fall 1969*. Nashville, Tenn.: The Commission. June 1971.
 144. Terman, F. E. & G. E. Reeling. *Engineering Education in New York*. Albany, N.Y.: University of the State of New York Press. March 1969.
 145. Tillery, Dale. *School to College: Distribution and Differentiation of Youth*. New York: College Entrance Examination Board. 1971.
 146. U.S. Bureau of the Census. *Statistical Abstract of the United States: 1971; 92d edition*. Washington, D.C.: U.S. Government Printing Office. 1971.
 147. U.S. Congress, Joint Economic Committee. *The Economics and Financing of Higher Education in the United States*. Washington, D.C.: U.S. Government Printing Office. 1969.
 148. U.S. Department of Health, Education and Welfare, Office of the Assistant Secretary for Planning and Evaluation. *Toward a Long-Range Plan for Federal Financial Support for Higher Education: A Report to the President (Rivlin Report)*. Washington, D.C.: The Department. January 1969.
 149. U.S. Department of Health, Education and Welfare, Office of Education. *Report on Higher Education, by F. Newman (Chairman) & others*. Washington, D.C.: U.S. Government Printing Office. 1971.

150. U.S. Department of Health, Education and Welfare, Bureau of Educational Personnel Development. *The Education Professions: An Annual Report on the People Who Serve Our Schools and Colleges—1969-70*. Washington, D.C.: The Department. September 1970.
151. U.S. Department of Health, Education and Welfare, National Center for Educational Statistics. *Associate Degrees and Other Formal Awards Below the Baccalaureate, 1969-70*; by M. E. Hooper. Washington, D.C.: U.S. Government Printing Office. 1971.
152. ———. *Digest of Educational Statistics, 1970*, Washington, D.C.: The Department. 1970.
153. ———. *Earned Degrees Conferred: 1969-70: Summary Data*; by M. E. Hooper. Washington, D.C.: U.S. Government Printing Office. 1972.
154. U.S. Public Health Service. *Health Manpower Perspective: 1967*. Washington, D.C.: U.S. Government Printing Office. 1967.
155. University of Florida. *Cost Study for the Fiscal Year Ended June 30, 1968*. Gainesville, Fla.: The University. October 10, 1969.
156. Usdan, M. D., D. W. Minor, & E. Hurwitz, Jr. *Education and State Politics: The Developing Relationship Between Elementary-Secondary and Higher Education*. New York: Teachers College Press, Columbia University. 1969.
157. Willingham, W. W. *Free-Access Higher Education*. New York: College Entrance Examination Board. 1970.
158. Wisconsin Coordinating Council for Higher Education. *Revised 1970-71 Budgeted Costs per Full-Time Equivalent Student by Level and Departmental Grouping: Based on Actual Fall 1970 Enrollments*. Madison, Wis.: The Council. *n.d.* (CCHE #71-17).
159. Wolk, R. A. *Alternative Methods of Federal Funding for Higher Education*. Berkeley, Calif.: Carnegie Commission on the Future of Higher Education. 1968.
160. Wooldridge, R. L. *Cooperative Education*. Boston, Mass.: Northeastern University. May 1969.

Appendix K

The Regents Priority Concerns for Higher Education

The Regents priority concerns for higher education as enunciated herein were identified and announced in April 1971. They are designed to speak to the immediate issues and problems of higher education in the State. Every college was requested therefore to consider these concerns and, where appropriate, respond to them.

1. Economics and Financing of Higher Education

Rationale:

The concern expressed in previous reports by the Regents about the financial condition of colleges and universities has reached the point where it must be considered a critical factor in higher education planning, both short- and long-range. Strained funding sources, both public and private, dictate that quantifiable measures of output be developed and used to assess objectively the results of expenditures made. This accountability effort must be accompanied by development of alternative modes of higher education financing to ensure the continued existence of a high caliber statewide system at a cost which is within realistic reach of the State's taxpayers.

2. Financial Aid to Students

Rationale:

The Regents have adopted a policy that no student should be denied access to higher education at an institution of his choice solely on the basis of his financial condition. With the enactment of subsequent expanded opportunity programs, future enrollments of higher institutions will include a larger segment of students who will have need for direct financial aid to cover a major portion of the costs incurred. The implications of both the recent enfranchisement of 18-year-olds (when related to eligibility for welfare programs) and the financial needs of part-time students must be examined and included as input in the restructuring of scholarship policies of individual institutions.

3. Higher Education as a Lifelong Opportunity

Rationale:

Education is an activity which cannot be limited by either time or prior achievement. Those individuals seeking higher education in the future will include a large, diverse population seeking to update their previous training and broaden their educational background. All higher educational institutions must, therefore, develop admission and readmission policies which will provide opportunities to accommodate this emerging form of continuing educational demand.

4. Humanistic Values In a Changing Society

Rationale:

The changing nature of society dictates a need for reexamination of long-taught knowledges and principles and a rededication of the educational process to the development of humanistic values of the citizenry. Higher educational institutions must cooperate with elementary and secondary educational institutions, social organizations, and civic groups to produce future generations which are more imaginative, better able to communicate, and more skilled in the understanding and management of emotions. More higher educational research should be directed toward development of new approaches to the teaching/learning system in order to generate educated individuals who will possess the humanistic attitudes and skills which are recognized as essential to the solution of societal problems.

5. Vertical and Lateral Mobility In the Educational Continuum

Rationale:

The Regents recognize that the students who need the greatest amount of assistance or guidance are the entering first-time college students and returning older students, including veterans. Programs for remedial assistance and liberal advanced placement must continue to be developed and used in order to ensure that the incoming first-time student will be placed at the proper academic level. The institutions must also develop academic credit policies which will afford a returning student (or veteran) greater flexibility in moving from one specialization to another and give due recognition to experiences developed in his life pursuits as well as from his previous formal schooling. Thus, in order for the Regents to be assured that a full range of opportunities is available, request is made that in the 1974 progress reports all institutions inform the Regents of what they have done and are doing to provide for an increased number of diverse students to be admitted annually through 1980, and of the criteria used in their selection.

6. The Governance of Higher Education

Rationale:

The governance of higher education is a major concern of the Regents today because it is through the governing board that the basic purpose, goals, and objectives of an institution are determined. The issue of rights and responsibilities as determined through power-sharing is a major component of the governance issue and one that must be adequately resolved by creation of mechanisms to encourage communication among involved groups. The Regents thus request that all institutions reexamine their present governance structures and where necessary develop and implement alternative structures which will bring about a realization of a more sound and responsive governance system. The role and rights of the learner must be respected as well as the desired goals and objectives of the institution to provide the opportunity to learn.

7. Development of Complementary Institutional Relationships

Rationale:

The concept of a statewide plan for the development of higher education requires that cooperative planning be undertaken by all sectors of higher education in order to insure maximum utilization of available resources in the State. This policy is directed toward such areas as control of new program introduction, consolidation of existing programs, and sharing of both faculties and physical facilities, all on a suitable, desirable, and feasible basis. The Regents therefore request that all institutions consider such possibilities as they formulate their individual plan.

8. Delivery Systems for the Teaching/Learning Process

Rationale:

The Regents recognize that noncampus study as well as other learning options are prime areas for investigation. New program development and traditional patterns of learning must be altered so that a greater dynamism can result in the teaching/learning climate. Implementation of the external degree program and the 3-year baccalaureate degree reflect the Regents policy of academic recognition of knowledge acquired regardless of the mode of acquisition. Remote instructional devices and libraries designed for electronic communications and computerized retrieval systems represent further efforts in the attempt to upgrade the learning process by allowing more effective resource utilization. The Regents therefore request that all institutions plan for wider opportunities for individual learning and for more effective use of new instructional technologies.

9. The Role of Research

Rationale:

Questions have been raised concerning the priority position of research at institutions of higher education, especially with regard to faculty advancement criteria and the nature and funding of research projects in light of citizenry demands for more social relevancy in research work. The Regents therefore request that all institutions examine their policies on research and report in their 1974 progress reports on the role to be assigned to the research function as well as on the sources and magnitude of support anticipated for such activities. The institutions are also urged to study ways in which research experience may be increasingly integrated with instruction at the undergraduate level. They should carefully delineate research proposals and plans of action addressing themselves to this issue.

10. Manpower Shortages and Surpluses

Rationale:

The Regents believe that the manpower needs of society should not become the sine qua non of higher education, but they do believe that manpower needs related to higher education are an important factor when considering the addition or deletion of programs to the curriculum. The Regents, therefore, urge all institutions to consider career possibilities for their students as they develop new programs or reassess outmoded programs. They suggest that counseling and placement offices be carefully developed and supported to guide students to the best advantage of the individual need as well as the social need.

11. Special Community Services for Higher Education Institutions

Rationale:

The issue of the extent and nature of the role of colleges and universities in relation to the general community is being debated in many quarters. The long-held nonpartisan position of the academic community, however, must be maintained in order to retain the basic principle of academic freedom as it has been known. The Regents therefore request that all institutions plan consciously and deliberately the nature and extent of their commitment to their communities to realize a feasible degree of involvement.

Appendix L

Excerpts From Chapter 567 Laws of New York, 1971

AN ACT

To amend the education law, in relation to the regents plan for higher education in New York State including the long-range master plans of the state university, the city university and private institutions of higher education.

Became a law June 17, 1971 with the approval of the Governor. Passed by a majority vote, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section two hundred thirty-seven of the education law, as added by chapter three hundred eighty-eight of the laws of nineteen hundred sixty-one, is hereby amended to read as follows:

237. Regents plan for higher education including approved plans of state university and city university of New York and plans of private institutions of higher education. 1. Purposes of planning. Master planning for higher education in New York State should:

- a. Define and differentiate the missions and objectives of higher education.
- b. Identify the needs, problems, societal conditions and interests of the citizens of the state of New York to which programs of higher education may most appropriately be addressed.
- c. Define and differentiate the missions and objectives of institutions of higher education.
- d. Develop programs to meet the needs, solve the problems, affect the conditions and respond to the public's interests by:
 - (1) Setting goals.
 - (2) Describing the time required to meet those goals.
 - (3) Identifying the resources needed to achieve the goals.

(4) Establishing priorities.

- c. Be in sufficient detail to enable all participants in the planning process, representatives of the people and the citizens themselves to evaluate the needs, objectives, program proposals, priorities, costs and results of higher education.
- f. Optimize the use of resources.
- g. Evaluate program effectiveness.

2. The regents shall, on or before the twenty-fifth day of April nineteen hundred seventy-one and each fourth year thereafter, request the state university trustees, the board of higher education of the city of New York, and all private higher educational institutions to submit long-range master plans for their development. Such request shall specify the nature of the information, plans and recommendations to be submitted, shall describe statewide needs, problems, societal conditions and interests of the citizens and discuss their priorities, and provide appropriate information which may be useful in the formulation of such plans.

3. The regents shall, once every four years, review the proposed plan and recommendations required to be submitted by the state university trustees pursuant to section three hundred fifty-four of this chapter, the proposed plan and recommendations of the board of higher education in the city of New York required to be submitted pursuant to section sixty-two hundred two of this chapter, and the plans of private institutions of higher education and, upon approval by the regents of the plans submitted by the state university trustees and the board of higher education, they shall be incorporated into a regents plan or general revision thereof for the development of higher education in the state. Such regents plan shall include the plan and recommendations proposed by the state university trustees and the plan and recommendations proposed by the board of higher education in the city of New York and may include plans with respect to other matters not comprehended within the plan of the state and city universities, including but not limited to improving institutional management and resources, instruction and guidance programs, financial assistance to students and extension of educational opportunities. In determining the need for additional educational facilities in a particular area, the plans and facilities of existing public and private institutions shall be fully evaluated. Such statewide plan shall include for information purposes a summary of all recommendations appearing in the prior statewide plan and subse-

quent amendments thereof containing a brief statement of action taken and progress toward achievement of each such recommendation.

4. During the calendar year nineteen hundred sixty-four and each fourth year thereafter the regents shall evaluate all available information with respect to the plans and facilities of private institutions and shall review and act upon the proposed plan and recommendations of the state university trustees and upon the proposed plan and recommendations of the board of higher education in the city of New York and incorporate such information, recommendations and each of the component plans so acted upon into a tentative regents plan or general revision thereof for the development of higher education in the state. Copies of such tentative regents plan or general revision thereof, as the case may be, shall be made available to the trustees of the state university, the board of higher education in the city of New York and the governing boards of all other institutions of higher education admitted to the university of the state of New York. Thereafter, after giving due notice, the regents shall conduct one or more hearings on such tentative regents plan or general revision thereof.

5. The regents shall transmit their plan or general revision thereof for the development of higher education in the state to the governor and the legislature on or before the first day of November, nineteen hundred sixty-four and each fourth year thereafter. The Governor may disapprove or conditionally approve any part of the plan or general revision thereof after notifying the regents of such disagreements at least sixty days prior to such action during which time they may revise their recommendations relating to such items and request the governor to adopt such revised recommendations in lieu of such action. Such plan or general revision thereof or so much thereof as shall be approved and upon such terms and conditions as the governor may impose, shall become effective upon such approval by the governor.

6. Any modification recommended by the state university trustees or by the board of higher education in the city of New York to their respective plans, theretofore formulated and approved pursuant to section three hundred fifty-four or section sixty-two hundred two of this chapter shall be reviewed by the regents who may hold one or more hearings thereon after giving due notice thereof. As approved by the regents, such modification shall be made a part of the respec-

tive plans of the state university and of the city university and shall, together with any modifications the regents may make to that portion of their plan for the development of higher education in the state not comprehended in the plans of the state and city universities, be transmitted to the governor and the legislature, all of which shall then become effective upon approval by the governor as modifications of the regents plan. By the first day of November in nineteen hundred seventy-four and each fourth year thereafter the regents shall summarize and report to the governor and the legislature any modifications made pursuant to this subdivision and shall include in such report a statement on the progress made in implementing the regents plan and their general recommendations with respect to higher education.

7. An advisory council on higher education consisting of the chancellor of the state university of New York, the chancellor of the city university of New York, and a representative of the commission on independent colleges and universities shall be convened by the commissioner of education and shall advise the regents and the commissioner on all phases of planning.

2. Section three hundred fifty-four of such law, as added by chapter three hundred eighty-eight of the laws of nineteen hundred sixty-one, is hereby amended to read as follows:

354. Powers and duties of state university trustees—planning functions. 1. The state university trustees shall, once every four years, formulate a long-range state university plan or general revision thereof and make recommendations to the board of regents and the governor for the organization, development, coordination and expansion of the state university and for the establishment of community colleges in areas suitable for and in need of such institutions, which plan and recommendations shall include the following:

- a. Plans for new curricula.
- b. Plans for new facilities.
- c. Plans for change in policies with respect to student admissions.
- d. Potential student enrollments.
- e. Comments upon its relationship to other colleges and universities, public and private, within the state.
- f. For informational purposes only, projection standards and overall expenditure projections of capital and operating costs.

Prior to transmitting their long-range state university plan or general revision thereof to the board of regents and the governor the state university trustees may, after giving due notice, conduct one or more hearings on such plan.

2. During the calendar year nineteen hundred sixty-four and each fourth year thereafter the state university trustees shall transmit their proposed plan or general revision thereof to the board of regents and the governor on or before the first day of June in each such year. Such plan shall be reviewed by the board of regents and shall be subject to approval by such board. As approved by the board of regents and incorporated into the regents plan or general revision thereof for the development of higher education in the state and, upon approval thereafter by the governor, such plan shall guide and determine the development and expansion of the state university and the establishment of community colleges until such plan is modified or revised in the manner provided herein.

3. By the first day of June in nineteen hundred seventy-four and every fourth year thereafter, the state university trustees shall report in writing to the board of regents and to the governor on the progress made in carrying out their responsibilities under such plan and their general recommendations with respect to public higher education, including recommendations as to modifications of such plan which the trustees deem essential to meet the then current demands upon public higher education. The state university trustees may also at any other time propose modifications which they then deem essential or desirable with respect to such plan. They may, after giving due notice, conduct one or more hearings on such modifications and shall transmit their recommendations therefor to the board of regents and the governor. Such modifications shall be subject to approval by the regents and thereafter by the governor in the same manner as such plan or general revisions thereof.

3. Subdivision two of section sixty-two hundred two of such law, as added by chapter three hundred eighty-eight of the laws of nineteen hundred sixty-one, is hereby amended to read as follows:

2. a. The board of higher education in the city of New York shall, once every four years, formulate a long-range city university plan or general revision thereof and make recommendations to the board of regents, for the organization, development, coordination and expansion of the city university of New York which plan and recommendations shall include the following:

- (1) Plans for new curricula.
- (2) Plans for new facilities.
- (3) Plans for change in policies with respect to student admissions.
- (4) Potential student enrollments.
- (5) Comments upon its relationship to other colleges and universities, public and private, within the state, and
- (6) For informational purposes only, projection standards and overall expenditure projections of capital and operating costs.

The plan shall be in such form as to provide a basis for the development of the regents statewide plan for higher education as defined in section two hundred thirty-seven of the education law. Prior to transmitting their long-range plan or general revisions thereof to the board of regents the board of higher education may, after giving due notice, conduct one or more hearings on such plan.

b. During the calendar year nineteen hundred sixty-four and each fourth year thereafter the board of higher education shall transmit their proposed plan or general revisions thereof to the board of regents, on or before the first day of July in each such year. Such plan shall be reviewed by the board of regents and shall be subject to approval by such board. As approved by the board of regents and incorporated into the regents plan or general revision thereof for the development of higher education in the state and, upon approval thereafter by the governor, such plan shall guide and determine the development and expansion of the city university of New York.

c. By the first day of June in nineteen hundred seventy-four and each fourth year thereafter, the board of higher education shall report in writing to the board of regents, a copy of which report shall be furnished to the state university trustees for information and comment, on the progress made in carrying out its responsibilities under such plan and its general recommendations with respect to the city university or its component colleges or other institutions in the city of New York including recommendations as to modifications of such plan which the board of higher education deems essential to meet the then current demands upon public higher education in the city of New York. The board of higher education may also at any other time propose modifications which it deems essential or desirable with respect to such plan. Such board may, after giving due notice, conduct one or more hearings on such modifications and shall transmit

its recommendations therefor to the board of regents and the state university trustees for information and comment. Such modifications shall be subject to approval by the regents and thereafter by the governor in the same manner as such plan or general revisions thereof.

4. This act shall take effect immediately.

Appendix M

Progress Towards the Regents Recommendations—1964 and 1968

The statewide plans are manifestations of an ongoing and dynamic process. As an indication of this, many of the recommendations made in previous plans are still pertinent and applicable today. New York State began its formal, statewide planning process earlier than most other states, and many of the ideas now coming into general acceptance were proposed long ago by the Regents. New York has solved many problems which the rest of the Nation is just now facing, and has operational programs to implement their solutions.

Of the 63 recommendations made by the Regents in 1964, 56 are still viable and applicable. The others have either been implemented or bypassed through the passage of time.

- (2) Recommend that all institutions which have not done so already, make plans for more efficient utilization of facilities and faculties. High priority of such plans is essential to the achievement of statewide enrollment goals and to higher quality performance.

The combination of the specific inclusion of the private institutions in the statewide planning process (Chapter 567 of the Laws of 1971) and the fiscal stringency foreseen in this recommendation of the Regents have combined to provide great impetus and practically total implementation of the recommendation. Because planning is an ongoing dynamic process, continuing refinement must be expected and encouraged.

- (4) Recommend that State University of New York examine its policies on student admission and the provision of institutional facilities, especially dormitories, in the light of currently available data on geographic mobility of students. Announcement of a definite policy by State University is necessary for regional planning on the part of other colleges and universities.

Impelled by the deepening fiscal crisis and by recent student rejection of dormitory life, the State University's future

dormitory and facilities development plans now may be easily known through the capital budget of the State.

- (5) Recommend that State University develop plans for expanding enrollment in community colleges by greatly increasing regular day work-study and other programs which make post-secondary education available to recent high school graduates and adults who would not otherwise be reached.

With the implementation of the Toward Full Opportunity Program and the emphasis being placed on lifelong opportunities, the concept of this recommendation may be considered to be implemented. Funding to actually make operable such programs has been largely incorporated into the State University's budgetary process.

- (6) Recommend that private 4-year colleges and universities which have unfilled places for new students at junior-year level give full information to the community and junior colleges. Such information should include the number of vacancies and the procedures for student transfer with minimum loss of time and energy.

The private institutions have greatly expanded their efforts to attract 2-year college graduates. The difficulty, which has been and still is present, is that the cost differential between the first 2 years in a public institution and the last 2 in a private institution is so severe that many private institutions have had to greatly increase their unfunded student aid expenditures in order to attract such students.

- (7) Recommend that consideration be given to the establishment of a program of "Regents Junior Year Transfer Scholarships" for community and junior college transfer students who demonstrate superior promise for continued college study while attending community colleges or privately controlled junior colleges.

The principle set forth here was reiterated most recently in Position Paper 13, and the Regents support the Commission on Independent Colleges and Universities' recommendation No. 4 submitted for the 1972 plan. (See page 237.)

- (8) Recommend to City University and State University that in planning for new baccalaureate degree institutions, further consideration be given to the feasibility of the creation of upper-level colleges. These colleges start at the typical junior year

and continue through the master's level in suitable academic fields.

Richmond College of The City University has been operating since the fall of 1967. Although the State University has been hindered by fiscal constraints, Herkimer-Rome-Utica College has been offering graduate and upper division courses in temporary facilities for 2 years, and is pursuing the concept underlying this type of institution. However, the Regents would like to have a special report on the progress made and funds expended by 1 September 1973.

- (9) Recommend that the Legislature return to the principle of fixing the number of Regents College Scholarships to be awarded each year as a percentage of total high school graduates to avoid discriminating against the able students of the future who will be members of larger graduating classes.
- (10) Will seek adjustments periodically in the amounts awarded under the Regents College Scholarship, the Scholar Incentive Program, and other assistance to students. This is necessary to keep student aid realistically related to the costs which students and parents must bear to elect programs and colleges of their choice.

The Regents have requested adjustments in the schedules of the various aid programs, and will continue to request them. The Regents Scholarships are a recognition of superior achievement, and, as such, will be reexamined in conjunction with the Scholar Incentive Program to permit flexible awards which will reward excellence and will subsidize future study at an adequate level of support.

- (11) Recommend that State financial assistance, similar to that provided to college students through the Scholar Incentive Program, be granted to student nurses in registered nurse programs at hospital schools of nursing.

Chapter 1154 of the Laws of 1969 provided for scholar incentive assistance to students in hospital nursing schools.

- (12) Will direct the State Education Department to make a special study of the programs and costs carried by students entering other types of specialized post-high school institutions (business schools, single-purpose technical schools, etc.) to determine whether the State should provide some form of financial assistance to students in such institutions.

Renewed interest and study will be directed to this problem. The inclusion in the 1972 plan of the first sample of the expected participation in the higher education planning process by proprietary schools, and the establishment of the associate in occupational studies degree in a number of institutions have expanded the concept of post-secondary education. These, along with a new appreciation for the values of occupational studies at the post-secondary level have all combined to require a reexamination of State student aid policies, particularly for students pursuing these studies.

- (13) Recommend that State University and City University for institutions within their respective systems clarify and describe procedures to facilitate placement and transfer of students, and make this information available to all other interested institutions.

Great progress has been made by the State and City Universities in implementing this recommendation as indicated in their statement on "Vertical and Lateral Mobility in the Educational Continuum." The Regents are still concerned and wish to see much more progress, particularly in lateral mobility.

- (14) Recommend that City University move rapidly to strengthen the faculties and programs of the schools of general studies (programs now for late afternoon and evening study), emphasizing their function of providing upper-division work for transfer students from community and junior colleges.

The school of general studies evolution at The City University has not gone as far or as rapidly as the Regents had desired. The Regents have urged The City University to reconsider its basic mission and its clientele again in this plan. The vertical mobility of students from the New York City Community Colleges into the 4-year institutions of The City University has been ensured, but in the traditional day program for the most part. The concepts inherent in the establishment of a school of general studies have, to a large extent, been adopted by the traditional colleges of The City University in response to the needs of the students entering under the Open Admissions Program. However, the Regents have strongly urged that much more thought be given to this subject.

- (15) Recommend that all higher educational institutions improve

their services to the culturally deprived by using the plan for institutional self-evaluation and the guidelines as formulated by the College Committee on the Disadvantaged appointed jointly by the Association of Colleges and Universities of the State of New York and the Commissioner of Education.

There have been many revisions and changes since the guidelines formulated by the College Committee on the Disadvantaged were published in 1965. This has been, and continues to be, a priority of the Regents and of the State. (See the discussion on "Equalizing Educational Opportunity" for a more exhaustive treatment of this subject.)

- (16) Recommend that all institutions of higher education which are expanding to help meet the State's manpower needs, build on already established strengths or pay special attention to the foundations laid before new programs of expansion are undertaken.

Following the expansive years of the sixties, this recommendation has renewed pertinence and is being closely adhered to in all program development. It is basic to the concept of regionalism and to the existing moratorium on new doctoral programs. It must be followed also as colleges attempt to expand occupational offerings.

- (17) Recommend that leadership in the private 2-year colleges seek to develop a greater balance between transfer and occupational curriculums. This should be undertaken especially by those colleges which serve constituencies that in interest and talent are representative of the general population.

This recommendation has been beyond the capabilities of the private 2-year institutions to implement. Competition from the community colleges and the need for capital investment have worked against implementation of the recommendation. In their planning, the private 2-year institutions should continue to reexamine their basic institutional purposes, goals and objectives, and adopt the necessary courses of action.

The recommendation may achieve new validity through the inclusion of proprietary institutions within this sector of post-secondary education and the development of new institutions of this type through the amalgamation of existing resources.

- (18) Recommend that community and junior colleges expand their

counseling and guidance services, with particular emphasis on occupational selection and training.

This recommendation is even more pertinent now, and is repeated in the Regents 1972 statewide plan. Although the Vocational Education Amendments have provided substantial assistance since 1968, more remains to be done. The Education Amendments of 1972 promise additional help when, and if, funded for these purposes.

- (19) Recommend that the private colleges seeking to expand occupational programs review carefully the opportunities that currently exist for Federal financial assistance for programs to develop technicians and semiprofessional workers.

The Education Amendments of 1972 promise help. They can provide greatly expanded funds for this purpose. The State Education Department recently has realigned internal responsibilities to assist in obtaining such funds.

- (20) Will direct the State Education Department to study the special costs faced by high school graduates to enter post-high school occupational programs and to determine the feasibility and desirability of helping students to defray the costs.

The Regents will continue to study all aspects of aid required to achieve equalized opportunity for post-secondary education. This study, which must be revised annually, is given added urgency by the Education Amendments of 1972 so that all student aid programs will exist in compliance and in a complementary relationship with the provisions of the Federal programs.

- (21) Will appoint a special committee representing the four major sectors of higher education in the State to prepare a plan for increasing the supply of trained community and junior college instructors in occupational fields.

There has never been a special committee appointed for this purpose. However, the Regents and the State University have separately addressed this problem. (See the discussions under "To Strengthen 2-Year Programs" and "Faculty" in the 1972 statewide plan for greater detail, and the State University's section on "Teacher Education.") The original charge may well be expanded to state ". . . in *all* [occupational] fields."

- (22) Will direct the State Education Department, in cooperation with State University, to give attention to the needs for inservice training of community and junior college instructors in occupational fields. These instructors should be helped to engage in organized periods of study to improve their effectiveness as college teachers. Persons with strong backgrounds of experience in technical and semiprofessional work, but with limited academic training should be aided in overcoming this deficiency.

The Department and the State University have cooperated in implementing this recommendation, providing numerous short-term courses for inservice training, largely through the Vocational Education Amendments. Also, the State University has made additional proposals on this subject in its 1972 master plan.

- (23) Will continue to encourage an articulated and coordinated development of both area vocational programs under local public school auspices and community college programs leading directly to employment as technicians and semiprofessional workers. The State should continue to make full use of all available resources for preparing technicians and semiprofessional workers, and such complete utilization should emphasize coordinated planning and development at both local and State levels.

Activities to implement this recommendation have been extensive, beginning with the development and encouragement of the Boards of Cooperative Educational Services and continuing through a variety of planning efforts in conjunction with the 2-year colleges. (See the "New York State Plan for Occupational Education," fiscal years 1972 and 1973 and the "New York State Annual Report for Occupational Education," fiscal years 1971 and 1972 for more comprehensive discussion.)

Additionally, the inclusion within the 1972 statewide plan of the noncollegiate sector is evidence of progress being made.

- (25) Will direct the State Education Department, in cooperation with State and City Universities and the Association of Colleges and Universities of the State of New York, to review present practices of all institutions offering extension services and to develop a statewide plan to expand, coordinate, and make effective use of extension programs.

A start has been made towards this recommendation through two projects funded under Title I of the Federal Higher Education Act of 1965: one at Syracuse University in cooperation with the Educational Policy Research Center at Syracuse and the other at Pace College in cooperation with the Regents Regional Advisory Council for New York City. Projects are planned in the Northeastern and Genesee Valley regions in 1973.

Systematic development of regional approaches to post-secondary continuing education is planned by:

- (a) generating data as a basis for sound planning
 - (b) inventorying existent programs
 - (c) developing counseling, guidance, and referral systems
 - (d) developing means of supporting and evaluating new programs
 - (e) generating a comprehensive master plan for post-secondary continuing education.
- (26) Will continue to review periodically the number of graduate fellowships authorized in New York State and the level of stipends provided for these fellowships to determine improvements made necessary by changing economic and educational conditions.

Due to financial constraints the Regents graduate fellowships have been eliminated. This does not alter the Regents commitment to graduate education.

Action will be taken sporadically to reinstate comprehensive and appropriate graduate fellowship programs. As is true with undergraduate student aid programs, annual review is called for in this area to reflect the changing availability of other funds for the purpose. In graduate study, the problems have become even more acute than at the undergraduate level because of the shifts in national priorities and the percentage of the gross national product devoted to research and development.

- (27) Recommend that the Trustees of State University and the Board of Higher Education of City University give special attention to steps which would integrate specialized institutions with those which are more comprehensive in scope. Special purpose colleges both at undergraduate and graduate levels which do not have clear operating relationships within general purpose centers of instruction and research should be discouraged.

This is the basic principle of the organization of the system of higher education in New York State. As such, it underlies and supports requests for the establishment of new institutions, and the renewed interest in regionalism. It must be considered at all stages of program development and constantly referred to in the evaluation of the university systems.

- (28) Will request the Legislature to authorize funds for a feasibility study of the establishment of a cooperative computer facility beyond the resources of any one institution to acquire, this facility to be used to strengthen graduate education and research.

Computer technology has evolved so rapidly that a feasibility study has long been outdated. Many steps have been taken by both the institutions and the Education Department, notably in the Genesee Valley Region and the Northeast Region, to make operational such relationships involving computational facilities, and strong recommendations are made to the university systems to continue and expand their efforts in implementing the intent of this recommendation.

- (29) Will direct the State Education Department staff in Higher Education to give special attention during the coming year to the impending shortage of new college teachers and to encourage and assist appropriate groups in taking steps to offset this emergency, including the following:

Consult with the Council on Graduate Education and the Advisory Council on Higher Education on ways in which the time lapse between the bachelor's degree and doctorate may be shortened; take all possible steps to implement any feasible plan that can be developed. Review and report to the Regents on the desirability and feasibility of the suggestion that a new degree be created short of the Ph.D. but involving a well conceived new program of research and study.

Consider ways in which retired professors could be encouraged and assisted to continue to serve. Give special attention to the recent report of the Governor's Committee on the Education and Employment of Women and seek the Committee's further advice and assistance in respect to college instruction.

Organize a coordinated effort by colleges and interested civic groups to activate in each major region of the State a "college faculty resources registry"—a directory listing of qualified personnel interested in part-time employment as college teachers.

Because the threatened shortage of faculty foreseen in the early 1960's never materialized, the emphasis in this recommendation has been shifted to improvement in quality and to equalization of opportunity for women and for representatives of minority groups. (See the Regents discussion on "Faculty" in the plan for more on this subject.)

- (30) Will explore with college administrators and representative faculty members possible ways to identify prospective college teachers early in their undergraduate programs and to encourage them in reaching their objectives.

In line with the current surplus of doctoral holders, emphasis has been shifted to advise students at the earliest possible time of the consequences and job prospects to be faced by pursuing a doctoral degree. (Note the statement in the Commission on Independent Colleges and Universities' plan that one distinguished undergraduate college is advising only its most able students to consider a Ph.D. program.)

- (31) Recommend the establishment by the Legislature and Governor in 1965, and subsequent years of legislative support for a program of distinguished visiting professors at undergraduate colleges.

Although distinguished professorships have been established at the State University colleges, and there is no legal prohibition against the award of a Lehman or Schweitzer chair to a primarily undergraduate institution, little progress has been made toward implementation of this recommendation. It is suggested again by the State University in the 1972 master plan, and inquiries connected with possible award to consortia of undergraduate colleges have been received by the Department.

- (32) Recommend that groups of colleges and universities that have close geographic and other ties develop interinstitutional cooperative programs and joint use of resources, human and material, to further the scope of their services to students and to the State.

This recommendation has formed the basis over the years for the Department's and the institutions' efforts to regionalize for more effective delivery of educational opportunities.

- (33) Will continue to support any additional legislative action

needed to give State University the autonomy of administrative operation typical of the strongest state universities in the country.

This recommendation expresses a fundamental principle of the State's relationship with the State University, and is still a guiding principle for the Regents. (See the State University's discussion of "Governance" in this context.)

- (36) Recommend that the Education Law be amended to clarify the realms of administrative jurisdiction and responsibility of the local sponsoring agency and the local boards of trustees of community colleges so that only the latter controls institutional operations such as the development of the budget, qualifications of staff, and specifications of physical plant equipment as well as matters of program development and instruction.

This is a matter of continuing concern and study. The delicate balances which exist between the variety of responsible, local governments and boards of trustees of community colleges require continuing negotiation for clarification and justice in the management of budgets and allocation of resources. The Regents reaffirm the principle inherent in this recommendation and direct that continuing efforts be made to achieve it as appropriate.

- (37) Recommend that the Education Law be amended to provide that, when a student leaves his home area where a community college exists, to attend one located elsewhere and enrolls in a program offered by the community college in his home area, no "charge back" to the area of residence should be levied. Provide further that exception to this general rule can be made for individual students if approved by the board of trustees of the community college in the student's area of residence.
- (38) Recommend that the Education Law be amended to establish another "charge back" to apply to costs incurred by a local supporting area for capital development and purchase of major equipment, with provisions similar to those relating to operating expenses.

The entire subject of financing the community colleges is receiving renewed attention and these recommendations must be considered in this new study. Chapter 681 of the Laws of 1971 did amend the provisions for chargebacks to counties not maintaining a community college for both capital and operating purposes, and Chapter 464 of the Laws of 1972 should

provide easier bonding at more advantageous interest rates for capital purposes.

- (39) Recommend that the Board of Trustees of State University give further study to advantages and disadvantages of dormitories at community colleges.

The Trustees of the State University have continued their evaluation of the desirability of residential facilities at the community colleges. The Agricultural and Technical Colleges have served, and are continuing to be used, as experimental pilot projects for this purpose. Residential facilities do exist at a few of the community colleges, particularly North Country, Adirondack, and Sullivan County. As consideration and redefinition of financing and purpose of the 2-year colleges continues, this must be held constantly as a factor.

- (40) Recommend that State University be given encouragement and support in strengthening its program of institutional research and fact-finding to improve both its own understanding and to aid in public interpretation of such matters as characteristics of the student body, faculty supply and demand, and fiscal needs for current operations and capital outlay.

The State University has perhaps the strongest institutional research and internal factfinding capability of any university system in the country. Its budget statement serves as a model for all State agencies in its clarity and precision. As stated in the Regents positions concerning the State University's responses to the Regents priority concerns, continuing attention is being paid to this problem and the Regents fully support the State University's attempts to accomplish the intent of this recommendation.

- (42) Have requested the Commissioner of Education, in consultation with the President of State University and the Chancellor of City University, to recommend a course of action for clarifying the State's relationship to City University for the consideration of all interested parties as soon as possible.
- (43) Recommend that consideration be given to amending the Education Law to authorize State appropriations for current operations to City University to be made on a current rather than a reimbursement basis.

The enactment of Chapter 173 of the Laws of 1969 amending sections 6215 and 6216 of the Education Law was

the most recent major attempt to clarify and regularize the relations of The City University with the State, and attempted to make more current the payment of State aid to The City University. However, as noted in the Regents comments on The City University's plan, this is an area which still presents problems, and the Regents recommend that appropriate action be taken to continue the clarification of the role of The City University.

- (44) Recommend that the Education Law be amended to give a continuing statutory basis to the present legislative practice of providing from State appropriations payments to New York City to assist it to meet costs of physical facilities for higher education.
- (45) Recommend that consideration be given to amending the Education Law to authorize payments from State moneys to City University for use in paying half the cost of construction of physical facilities as opposed to half the cost of debt service for higher educational capital development, as is now the case.
- (46) Recommend that consideration be given to making payments for construction costs to the Board of Higher Education rather than to the Board of Estimate of the City of New York so that the University can participate more fully and flexibly in the programs of the State Dormitory Authority and the Higher Education Facilities Act of 1963.

The role of the City University Construction Fund has been reviewed and legislation is to be proposed to continue to make it a more flexible and responsive instrument for achieving The City University's physical facilities development. However, as noted by the Regents, there may well be more appropriate means of accommodating The City University's future enrollments than by continuing to build new campuses. The Regents invite The City University to introduce appropriate legislation to enable whatever alternative steps may be necessary.

- (47) Recommend that there be developed an equitable overall formula for determining the State appropriation to City University, including graduate education, and that this formula be advanced as an amendment to City University's Master Plan as soon as possible.

The provisions of section 6215 that provide for State appropriations equal to the amount expended by the city on be-

half of The City University largely achieve the intent of this recommendation. It is unfortunate that this legislation did not grow out of The City University's master plan, but, rather, was introduced by the Department of Audit and Control and the Division of the Budget.

- (48) Recommend that all New York colleges and universities promote the practice of granting advanced credit in those fields for which proficiency examinations have been passed, regardless of whether the competence of the student was developed through formal instruction or through independent study.
- (49) Will expand the number of fields of studies for which State Education Department proficiency examinations are available as rapidly as possible, with priority given to such courses as anthropology, business, professional education, and statistics.

Acceptance of these recommendations has been so widespread and successful that one may view them as being the genesis of the development of the Regents External Degree Program and of the State University's Empire State College. Continued progress is expected in this area.

- (50) Recommend that institutions serving large enrollments or offering complex, advanced programs, plan as rapidly as possible to develop on-campus educational television facilities (closed circuit or 2500 megacycle transmission).

Although the technology has been developed to facilitate the implementation of this recommendation and its feasibility demonstrated, recent fiscal constraints have slowed the installation of such broadcast facilities.

- (51) Recommend that individual institutions (public and private) consider the development of a "college communications center" and programs of training of faculty in the use of all parts of such a center. These centers facilitate a coordinated and complete use of educational communications materials and equipment, such as radio, television, programmed instruction, library resources, and computer-related instructional aids.

This recommendation has remained basic to the Regents development of the 3R's Systems, and their commitment to it is reiterated in the 1972 plan. These centers should combine a coordinated and complete use of media materials systems and equipment including all forms of developing and developed electromechanical means of transmission and should include

radio, television, programmed instruction materials, library resource materials of all kinds, computer-related instructional aids, and such other materials as may be transmitted from campus to campus and from communications center to communications center within a region as will enhance and enlarge the learning opportunities made available to each student. These same opportunities should be made available on an individualized instruction basis and for individual learning as may be transmitted from a campus through a local radio station, either FM or AM, or through a CATV system. Where such transmission is desirable, the public access channel of the cable system dedicated to instructional/educational need and use should be accessed by the institution or by a group of institutions with an established administrative method of its own.

- (52) Will continue to cooperate with State University, other colleges and universities, and the educational television councils in bringing to realization a truly statewide educational television network.

The Regents reaffirm their commitment to the principle of network interconnections between various radio and television transmission systems, both open circuit and cable systems, including, but not limited to the Instructional Television Fixed Service and to computer-assisted methods of sharing resources from region to region. The Regents reaffirm their commitment to this principle, although recent fiscal constraints may have prevented the development of coordinated broadcast materials to take advantage of the physical broadcasting network operating in Binghamton, Watertown, and the other Big Six major cities of the State. Fiscal constraints, however, should not be designated as totally preventing the installation of electromechanical dissemination means to large bodies of potential students in medical and corrective institutions. Only the lack of *reception* facilities has prevented such programs from coming into being and functioning efficiently.

Recent State and Federal legislation regarding cable television and its ability to retransmit educational materials in various forms are regarded by the Regents as an important new developmental step in the regionalization of post-secondary institutions of the State.

The advent of airborne satellite communications is also

being studied for its implication for a system of educational material interchange and exchange.

- (53) Recommend that all colleges and universities, private and public, which have not yet done so, intensify their studies, experimentations, and actions to establish year-round operations, and in doing so examine not only the mechanics involved but also ways to provide a full range of programs throughout the year.

There has been renewed interest in this recommendation since the financial crisis has become so severe. The State University should have a report on a new feasibility study of year-round operation available in the near future. The cresting of the wave of expanded enrollments makes this even more pertinent, and the climate of fiscal constraint should be much more conducive to acceptance of the need by the faculties. This is viewed as one of the definite possibilities for accommodating extra students during the remainder of the decade without overbuilding for the remainder of the century.

- (54) Recommend establishing a statewide system of regional reference and research libraries along the lines described in the Regents special committee report of 1961; this should be set in motion by a pilot project for which the Regents have requested funds from the Governor and Legislature for 1965-66.

The first regional reference and research library system was developed in 1966. Since that time, nine 3R's Systems have been organized covering the entire State. The 3R's System has become basic to all academic library development. The Regents support the introduction of legislation which will provide statutory aid for the 3R's program. It is referred to several times in the 1972 plan, always as the basis for planning of library development by individual institutions or institutional systems.

- (55) Recommend that institutions of higher education increase their use of the resources available in the museums of the State by establishing additional cooperative relationships for research and undergraduate instruction. Joint use of facilities and highly specialized staff in such areas as anthropology, history, and fine arts is urged, along with the development of more formally organized opportunities for students to earn college credit through individual study and proficiency examinations.

- (56) Have drafted a statewide plan for expanding and strengthening museum services and urge that legislation implementing this plan and providing budgetary support for it be enacted.

Work has continued on the development of a plan for statewide museum services. A great deal depends upon the completion of the South Mall museum building and the facilities which will be made available there to the State museum. In the meantime, the demand for museum facilities by students engaged in external degree type work has mounted and is expected to continue to increase. (See the State University's plan for an organized attempt to use such facilities as a part of traditional instruction.)

- (57) Recommend that each private college and university develop in 1968 a "perpetual inventory" type of long-range plan, looking ahead at least 5 years for program and fiscal development.

Given impetus by the Bundy Commission Report in 1968, the private colleges have increased their planning capacity until, in the summer of 1970, they engaged in the negotiations preceding the drafting of the amendments to the planning law which were enacted as Chapter 567 of the Laws of 1971. The inclusion in this plan of a full plan developed on behalf of the private colleges and universities by the Commission on Independent Colleges and Universities is the surest demonstration of their increased interest and capacity for planning. The Regents intend to provide continuing stimulation and impetus to the institutional planning processes of the private colleges and to expand this to include agencies in the noncollegiate sector.

- (58) Will direct the State Education Department to seek to develop better per-student cost figures on which to base cost estimates and comparisons through a study of fiscal procedures employed. The study should be undertaken in cooperation with the Board of Trustees of State University, the Board of Higher Education of the City of New York, and the privately controlled colleges and universities.

Work has continued on this subject and progress has been made. The Regents believe that they are on the verge of achieving significant progress in this area and intend to continue their efforts. The current fiscal crisis and demands for

accountability have accelerated the need for such figures. Of particular note is the work done by the State University, Hofstra University, and the University of Rochester in conjunction with the National Center on Higher Education Management Systems at WICHE which is expected to produce greatly improved national per-student cost data.

- (60) Will establish a periodic survey of college-going aspirations and other related characteristics of high school seniors, using fully the Regents Scholarship Examination which already reaches annually approximately 65 percent of the high school graduates in the State.

There is now an annual survey of the aspirations of high school seniors. One longitudinal study of 10,000 high school graduates in 1968 has been carried through 3 years and is continuing. Methods of ascertaining more precisely the aspirations and capabilities of high school graduates are currently under study, and will be developed for more precise information and better generalization about the population of the State.

- (61) Will direct the Education Department to develop a plan in consultation with chief executive officers of colleges and universities representative of The University of the State of New York, to provide guidelines and more formal procedures for the establishment, under either public or private auspices, of new curriculums, new institutions of higher education, new college branches, or extension centers. These guidelines and procedures should guarantee the widespread discussion and review of proposed new developments by the academic community in New York State before action is taken by the Regents or the Department.

The Regents Rules and Commissioner's Regulations have been revised to accomplish this purpose. In addition, the 1971 amendments to the planning law (chapter 567) legislated more precise definitions of the procedures to be followed in the proposal for the establishment of new institutions. Also, the changed fiscal climate has reduced the number of institutions proposed for establishment. Work is presently in process to alter the registration procedure which should facilitate review of new academic programs.

- (62) Recommend that the conditions of incorporation of a college,

now requiring at least \$500,000 be changed to \$1,000,000, except that the former figure will remain for incorporation of new junior colleges.

Legislation to require that incorporation of a college be supported by \$1 million rather than \$500,000 has been submitted intermittently since this recommendation was made. To date it has not been enacted, but will be considered again for submission.

- (63) Recommend that the Legislature appropriate the sum of \$500,000 annually to be used by the Board of Regents to contract with colleges, public or private, for the development of the initial phases of programs in areas of critical State need, the contracts to be made for a period not to exceed 5 years, and to require a contribution of specific institutional resources.

Some programs of critical need, among them nursing and medicine, have received categorical aid. The Regents do not believe that this is a particularly valid method for programs of more than 2-years duration, and prefer to develop budgetary requests to achieve the purposes as appropriate rather than to have a continuing appropriation which, by its nature, must be used.

1968 Recommendations

Because of the evolutionary nature of the planning process, the 29 recommendations made by the Regents in 1968 were much more specific in nature than those in 1964. To a large extent, they proposed implementation of certain aspects of the 1964 general principles, and, in some cases, were revised annually to reflect changing conditions and needs. This evolution continues in the development of the 1972 recommendations.

- (1) Each institution of higher education prepare a comprehensive long-range plan and establish as a continuing activity the review and updating of such a document.
- a. The plans of public and private institutions include not only growth projections but also estimates of the cost of providing enlarged educational services.
 - b. Plans for facilities should include such elements as:
 - (1) the amount, the condition, and usage of existing space and space under construction;
 - (2) the effect of changing academic programs on existing and projected space needs;

- (3) provision of basic space needs for the increased student enrollment;
- (4) the realistic identification of funds to finance the planned construction.

This recommendation may be viewed as a more specific statement of the principles involved in recommendation 57 made in 1964. As indicated there, significant progress has been made in implementing this recommendation. The emergence of the role of the Commission on Independent Colleges and Universities as a coordinating agent for the plans of the private institutions and the amended section 237 of the Education Law (Chapter 567 of the Laws of 1971) have established a firm basis for the implementation of this recommendation. However, as the planning process is an evolving, continuing process, attention must be given to possible amendment of this recommendation, and the Regents have attempted to stimulate such thought on the part of the institutions in their 1972 plan.

- (2) The projections of the full-time undergraduate and graduate enrollment in *Enrollment Projections 1968-80: New York State Higher Education* of the State Education Department be adopted as the basis for planning.

This recommendation has served its purpose and, as noted in the 1968 statewide plan in the discussion of recommendation No. 3 made in 1964, annual revisions have been made. At this time, the Regents recommended projections of enrollment are in the table on page 85.

- (3) The Higher Education Facilities Act and the Higher Education Act of 1965 be funded to the authorized levels.
 - a. Federal programs authorized under the Higher Education Amendments of 1968, but for which no appropriations have been made, be funded.
- (4) Federal aid for the support of students in higher education be increased according to need. This aid to be direct—scholarships, loans, and fellowships—rather than aid in the form of special tax relief or tax credit.
- (5) Federal grants be provided to higher education institutions to improve financial management, planning, and long-range development. Programs should be consolidated and simplified so that duplications of categorical aid may be avoided.

The passage of the Education Amendments of 1972 include the authorization for these recommendations. Whether

the authorized funds will be appropriated and the expenditure of the funds appropriated be authorized is still subject to congressional and Presidential action.

- (6) The Regents recommend the naming of a select committee to study the future financing of higher education in the State.

Although a select committee has not been appointed, this subject has received extensive attention from every level up to that. Most recently a special task force was appointed under the chairmanship of the director of State operations to report to the 1971 Legislature. Although this task force could not reach agreement in time for action in the 1972 session, it is expected that its deliberations will be resumed and a report submitted for the 1973 session. The Regents have made a number of specific suggestions to implement this recommendation in the 1972 plan which they will expect to have included in the renewed deliberations of the task force.

- (7) The Legislature fund the student aid programs outlined in "Freedom to Pursue a College Education."
- a. The number of Regents college scholarships to be awarded annually be fixed at 10 percent of the total number of high school graduates in the State for the preceding year, thus increasing the number of such scholarships for 1969-70 from 18,843 to 22,500.
 - b. The maximum award under the Scholar Incentive Program be raised from \$500 to \$800 annually, applicable to both undergraduate and graduate students. The family net taxable income level for receiving the maximum scholar incentive award to be raised to \$3,000 instead of \$1,800 as at present.
 - c. The minimum scholar incentive award for students whose family net taxable income balance is \$11,800 or higher be eliminated.
 - d. The Scholar Incentive Program be amended to assure greater equity in the distribution of awards, providing assistance to certain students not previously eligible, including (1) the extension of the program to students in hospital schools of nursing, (2) the payment of awards for study at a foreign or out-of-state college where such a study is approved by New York State institutions, and (3) the right to exclude parental income for certain undergraduate students on the same basis as for graduate students.

As stated in the discussion of recommendation No. 10, of the 1964 recommendation, this is a subject which must be

pursued annually in order to adequately reflect changing circumstances. Revised formulas are again being considered for the 1973 session of the Legislature. They will continue to embody the basic principles outlined in "Freedom to Pursue a College Education" as defined by Position Paper 13 and will reflect the changing nature of Federal support to be expected under the provisions of the Education Amendments of 1972.

- (8) The Regents Graduate Fellowship Program be enacted as adopted by the Regents in October 1968.

Although budgetary constraints have caused this program to be eliminated, the Regents support continuing reexamination of the Graduate Fellowship Program. Such reexamination will have to be carried on each year.

- (9) The Regents be authorized to contract with educational institutions in the State to establish courses to assist foreign nurses to qualify for registered professional nurse licenses in New York.

Chapter 693 of the Laws of 1969 implemented this recommendation. (See the section on nursing included in the 1972 plan for a more extensive treatment of this subject.)

- (10) The Legislature provide funds for stipends of \$2,500 per year for registered professional nurses who wish to earn the bachelor of science degree to qualify for graduate study leading to the teaching of nursing.

This aid program must also be reexamined for funding levels in light of possible appropriations under the terms of the Education Amendments of 1972.

- (11) The existing traineeship program for graduate study in nursing be discontinued and be replaced by a new traineeship program with more adequate financial incentives.
- a. Awards be made for full-time or half-time study in all approved graduate programs of nursing in New York institutions. Such programs may be on the master's or doctoral level.
 - b. All graduate students in nursing who meet the academic and residence requirements for scholar incentive awards be eligible to hold traineeships.
 - c. The level of support consist of tuition and education fees plus a maximum stipend of \$2,500 for full-time study. In addition, there be an allowance of \$500 per dependent child for the full-time trainee (no more than two such chil-

dren may be claimed) and \$250 per dependent child for the half-time trainee (no more than one such child may be claimed). Stipends be determined on the same basis as described for the proposed Regents graduate fellowships.

- d. Tenure of awards be limited to 2 years for full-time study and 4 years for half-time study.

This program must also be reexamined annually to determine the appropriate funding levels, in view of possible other sources of support.

- (12) A program of direct financial assistance, administered by the Regents, be extended to dental schools for the increase of enrollment comparable to the program now operating in medicine.

Such a program has been authorized, but funds have not been appropriated by the State. The program is still desirable, but must be tied to existing Federal capitation grants and be reexamined periodically in light of changing Federal funding. Administration of the Federal grant program should be placed in the hands of the Regents.

- (13) A study be made of the need for additional medical educational services in the State. The responsibility for the existing programs of financial assistance to private schools of medicine be transferred from the State University to the Regents and consideration be given to the expansion of this program.

The administrative aspects of this program have been fully implemented. The administration of the State University program has been transferred to the State Education Department and is now administered under the provisions of article 129 of the Education Law. As with other aid programs the adequacy of the funding level must be reexamined annually in light of all programs of aid (See the discussion under "To Strengthen the Professions" for more information.)

- (14) As recommended in the Post-Vietnam Planning Committee Report to the Governor, there be recruitment, retraining, and employment of military trained paraprofessional personnel in the health and medical sciences.

The most significant progress to be identified here is the enactment of chapters 1135 and 1136 of the Laws of 1971 which provided for the training, registration, and supervision of two new categories of health personnel to be known as

"physician's associates" and "specialist's assistants." The Regents Rules and Commissioner's Regulations are being revised to clarify the intent of this legislation. At this time, the greatest barrier to the full employment of these personnel appears to be the legal responsibility of the physician and the need to revise insurance laws and rates.

- (15) There be established a Trainee (Fellowship) Program for full-time graduate study in engineering, awarding stipends of \$3,000 to students and cost of education allowances to the schools of \$3,500.
- (16) There be established a program of New York State Professorships in Engineering, each chair to receive State support of \$25,000 in salary and \$5,000 for supporting services.

The engineering schools are now in a period of retrenchment and consolidation resulting from declining enrollments and deficit budgets. Legislation was introduced in 1971-72 to provide categorical aid to the nonpublic institutions of higher education offering programs in engineering (Senate 9348, March 7, 1972). However, other programs were given higher priority and this legislation did not pass. The matter of assistance to the engineering schools, either through establishment of professorships or through categorical aid, is on a continuous study basis; further recommendations will be dependent upon the developing trends in both enrollment and engineering employment.

- (17) There be established regional, closed-circuit, talkback television networks for the expansion and improvement of part-time, industrial student, graduate programs in engineering.

The main impetus for the establishment of such television networks is no longer focused solely upon engineering education. However, the need for some type of television system similar to that described is even more pertinent now. (See the Regents discussion of recommendations No. 50 and No. 51 in 1964, and their comments on the State University and City University plans for new or expanded delivery systems.)

- (18) There be State financial assistance to institutions to provide improved computer services, instructional space, and equipment for graduate engineering.

Again, as was true in the preceding recommendation, em-

phasis has been shifted away from the desirability of this program exclusively for graduate engineering and it returns to its more general form as initially set forth in recommendation No. 28 in 1964. Both the State University and The City University have presented proposals for improving computer services, and the Regents lend their support to the principles involved. Specific plans still must be developed and proposed for particular action.

- (19) A study be undertaken of social work programs in 2- and 4-year institutions to determine how they may most effectively contribute to the practice of social work.

As a result of several studies (among them the study done by Laurin Hyde Associates, and the studies done under the aegis of the Bureau of Research in Higher and Professional Education) and the pressures placed upon social welfare agencies by mounting unemployment, substantial restructuring of the practice and educational preparation of social workers has taken place. This is a field which will require continuing study and updating.

- (20) Additional programs in social work be established at times and in regions found to be most appropriate.

Continuing study is called for here and is being carried out.

- (21) A program of State support be provided to permit existing institutions offering programs in social work to enlarge facilities and to receive annual grants for institutional purposes in order to permit the rapid enlargement of enrollment of students, particularly at the graduate level.

a. Continuing experimentation be encouraged regarding the nature and content of existing programs of social work education.

In line with the Regents comments regarding recommendation No. 63 made in 1964, the Regents will request specific grants for expansion of existing facilities for social work education, when and if there is a specific, demonstrated need.

a. This recommendation is in line with the Regents overall desire that all programs be continually reexamined for pertinence and relevancy, and that there be ongoing experimentation for new modes and methods of delivery. The response to No. 19 above indicates that this recommendation has been heeded.

- (22) The Legislature provide direct grants to enable institutions to admit increased numbers of opportunity students and to extend the services necessary so that they may succeed in higher education.

Although CUNY-SEEK had been operative from 1966-67 and SUNY-SEEK from 1967-68, chapter 1077 of the Laws of 1969 added article 130 to the Education Law (Opportunity for Higher Education). This act authorized the Commissioner of Education to contract with public and non-public institutions of higher education for the support of special programs for screening, testing, counseling, and tutoring of graduates of approved high schools or individuals who had attained high school equivalency diplomas, had potential for the completion of post-secondary programs, and who were economically and educationally disadvantaged. Chapter 917 of the Laws of 1970 amended this act to provide that the Regents would administer the higher education opportunity funds for the private colleges, and added section 6452 which provided for the administration of such funds by the State University and The City University subject to the approval of the director of the budget and of the Regents. Such appropriations have been made each year.

New York State Funding Opportunity Programs by Academic Year

| | CUNY SEEK | SUNY SEEK-/EOP | Com. Col. State Ed. Dept. | | Total |
|---------|------------------------|-------------------|---------------------------|---------------------------|---------------|
| | | | EOP | HEOP | |
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1966-67 | \$ 1,500,000 | — | — | — | \$ 1,500,000 |
| 1967-68 | 2,500,000 | \$ 500,000 | — | — | 3,000,000 |
| 1968-69 | 5,500,000 | 1,973,295 | — | — | 7,473,295 |
| 1969-70 | 8,750,000 ¹ | 4,873,900 | — | \$ 2,500,000 ² | 16,123,900 |
| 1970-71 | 9,000,000 | 6,702,000 | — | 4,000,000 ³ | 19,702,000 |
| 1971-72 | 12,500,000 | 9,020,452 | \$4,000,000 | 6,250,000 | 31,770,452 |
| 1972-73 | 12,500,000 | 9,368,000 | 3,285,000 | 6,850,000 | 32,003,000 |
| Totals | \$52,250,000 | \$32,437,647 | \$7,285,000 | \$19,600,000 | \$111,572,647 |

¹ Includes \$2,500,000 allocated to CUNY-SEEK through State Education Department.

² Reduced from \$5 million per A above.

³ For nonpublic institutions only.

Further discussion of this project may be found under "Equalizing Educational Opportunity" in the 1972 plan.

- (23) Each college and university in an urban community be encouraged to reserve a percentage of freshman, nonresidential students approximately equal to the percentage of the urban community designated as disadvantaged.

Many private institutions have responded only too well to this recommendation, and have not received sufficient public funds to serve this public purpose. (See the Regents discussion of "Student Financial Aid" on the Commission on Independent Colleges and Universities Plan.)

- (24) A continuing study be conducted of the teaching and learning processes relative to the emerging issues of society to guarantee the relevancy of the teacher education and certification processes to the educational enterprise.

By its nature, this recommendation calls for perpetual action. That substantial study has been carried forward may be seen in the 1972 plan particularly under the heading of "Preparing Professionals for Elementary and Secondary Education: Modifying Preparation and Practice." Obviously this is an ongoing inventory and examination process, and, as such, will continue.

- (25) The Legislature appropriate the sum of \$1,000,000 to stimulate interinstitutional cooperation, private and public.

In line with their statements regarding recommendation No. 63 made in 1964 and the discussion of "To Regionalize for Maximum Efficiency," the Regents now prefer to request specific budgetary allocations to be used on a discretionary basis.

- (26) A legislative appropriation finance an intensive study of continuing education in higher education so that a long-range effective Master Plan may be developed.

- (27) Each institution independently, and in cooperation with other institutions, develop, as a part of its planning and budgeting process, plans for continuing higher education consonant with its own strengths and purposes.

A study is being carried on by the Syracuse University Research Corporation, financed through Federal funds under the provisions of the former Title I of the Higher Education Act of 1965. The Regents have made lifelong opportunity one of their priority concerns, and have repeatedly urged institu-

tions to reexamine their purposes and goals in order to accommodate the needs of individuals throughout their lifetimes. Continuing education must not continue as a separate entity, but rather the overall higher educational enterprise must accommodate within its process provision for such opportunities. (See also the discussion of this under No. 25 of the 1964 recommendations.)

- (28) Each college and university continue to build a strong library program to support its objectives and goals, giving particular attention to the development of adequate resources including the full range of media on each campus and in conjunction with other institutions.
- a. Each institution of higher education, public or private, be an active member of a reference and research library resources system and make full use of statewide library services provided through the 3R's program, such as the New York State Interlibrary Loan Network.
 - b. The State establish a research library collection improvement fund of \$2,000,000 annually to provide grants to research resource centers in the New York State Interlibrary Loan Network, a substantial portion of these funds to be used to strengthen the research collections of the New York Public Library.
 - c. Joint plans for electronic data processing applications to library services and communications networks to assure compatibility between the State University, The City University, private colleges and universities, and the State Library in its development of the 3R's program. National programs, such as the Network for Knowledge and the several programs for automation in the Library of Congress, also be related to developments in New York State.

This recommendation expanded on recommendation No. 54 contained in the 1964 recommendations and discussed above. The Regents reaffirm this recommendation and, in the years ahead, will seek to enlarge upon the great progress reported by the State University, The City University, and the Commission on Independent Colleges and Universities.

- (29) All institutions investigate the applicability of new technological devices designed to assist in instruction, such as multi-institutional systems of computer assisted instruction and library oriented information retrieval and communications programs, in order to provide greater opportunities for individualized instruction and study.

Progress has been reported by all institutions, not only in the investigation, but in the actual application of many of these techniques. The Regents urge their continued devotion to the principles embodied in this recommendation. They so state repeatedly in the 1972 plan.

Appendix N

Authorized Degrees and Academic Programs of The City University of New York by Constituent Unit

Bernard M. Baruch: B.A., B.S. in Ed., B.B.A., M.S. in Ed., M.B.A., M.P.A.

Brooklyn: A.A.S., B.A., B.S., M.A., M.S., M.S. in Ed., M.F.A.

City: B.A., B.S., B.S. in Ed., B. Arch., B.E., B. Tech., M.A., M.S., M.S. in Ed., M.Arch., M.E.

Medgar Evers: B.A., B.S., A.A., A.S., A.A.S.

Hunter: B.A., B.S., B.F.A., M.A., M.S., M.S. in Ed., M.S.W., M.U.P.

John Jay: A.A., A.S., B.A., B.S., M.A., M.S., M.P.A.

Herbert H. Lehman: B.A., B.S., B.F.A., M.A., M.S., M.S. in Ed.

Queens: B.A., B.S., M.A., M.S. in Ed., M.F.A., M.L.S.

Richmond: B.A., B.S., B.S. in Med. Tech., M.A., M.S., M.S. in Ed.

York: B.A., B.S.

University Graduate Center: M.A., Ph.D., D.S.W.

BERNARD M. BARUCH COLLEGE

Bachelor of Arts (B.A.)

Black or Puerto Rican Studies

Economics

English

History

Mathematics

Political Science

Psychology

Religion and Culture

Sociology

Spanish

Statistics

Bachelor of Business Administration (B.B.A.)

Accounting
 Economics
 Finance and Investments
 Industrial Psychology
 Management
 Marketing
 Office Management and Secretarial Studies
 Public Administration
 Statistics

Master of Business Administration (M.B.A.)

Accounting
 Business Administration and Policy
 Computer Methodology
 Economics
 Finance and Investments
 Health Care Administration
 Home Economics
 Industrial Psychology
 International Business
 Management
 Management For Engineers
 Marketing
 Operations Research
 Statistics
 Taxation

Master of Public Administration (M.P.A.)

Health Care Administration
 Public Administration

Teacher Education Programs

School Administrator and
 Supervisor
 Elementary Teacher, N-6
 Secondary Academics, 7-12
 English
 Mathematics
 Social Studies

M.S. in Ed.

B.S. in Ed.

B.A., B.S. in Ed.

B.A., B.S. in Ed.

B.A., B.S. in Ed.

Spanish
 Commerce
 Commerce and Distributive
 Occupation Subjects ^{etc.}

B.A., B.S. in Ed.
 B.B.A., B.S. in Ed., M.S. in Ed.
 B.B.A., B.S. in Ed., M.S. in Ed.

BROOKLYN COLLEGE

Bachelor of Arts (B.A.)

Afro-American Studies
 American Studies
 Anthropology
 Area Studies
 Art
 Biology
 Chemistry
 Classical Civilization
 Classical Languages
 Comparative Literature
 Economics
 English and Literature
 French
 Geology
 German
 Health and Physical Education
 Hebrew
 History
 Home Economics
 Italian
 Judaic Studies
 Mathematics
 Music
 Philosophy
 Physics
 Political Science
 Psychology
 Puerto Rican Studies
 Russian
 Sociology
 Spanish

**Speech and Theatre
Urban Studies**

Bachelor of Science (B.S.)

**Accounting
Biology
Chemistry
Computational Mathematics
Geology
Health Sciences
Health and Physical Education
Mathematics
Music (Composition)
Music (Performance)
Nursing
Physics
Psychology**

Master of Arts and Master of Science (M.A.—M.S.)

**Anthropology
Art History
Biochemistry
Biology
Chemistry
Classics
Comparative Literature
Economics
English
French
Geology
German
History
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Russian Language and Literature
Sociology**

Spanish
Speech and Theatre
Urban Studies

Master of Fine Arts (M.F.A.)

Art
Speech and Theatre

Teacher Education Programs

| | |
|-------------------------------------|----------------------|
| School Administrator and Supervisor | Advanced Certificate |
| Elementary Teacher, N-6* | B.A., M.S. in Ed. |
| Elementary Teacher, N-6 and: | |
| English (7-9) | B.A. |
| French (7-9) | |
| General Science (7-9) | B.A. |
| German (7-9) | |
| Hebrew (7-9) | |
| Italian (7-9) | |
| Latin (7-9) | |
| Mathematics (7-9) | B.A. |
| Russian (7-9) | |
| Social Studies (7-9) | B.A. |
| Spanish (7-9) | |
| Mentally Retarded | M.S. |
| Speech and Hearing Handicapped | M.S. |
| Secondary Academics, 7-12* | |
| Biology | B.A., B.S., M.A. |
| Chemistry | B.A., B.S., M.A. |
| Earth Science | B.A., B.S., M.A. |
| English | B.A., M.A. |
| French | B.A., M.A. |
| German | B.A. |
| Hebrew | B.A. |
| Italian | B.A. |
| Latin | B.A. |

* Offers specialization in teaching emotionally disturbed children. Permanent certification is in same academic field as provisional certificate.

| | |
|---------------------|----------------------------|
| Mathematics | B.A., B.S., M.A., M.S. |
| Physics | B.A., B.S., M.A. |
| Russian | B.A. |
| Social Studies | B.A., M.A. |
| Spanish | B.A. |
| Art | B.A., M.A. |
| Health | B.A., B.S., M.S. |
| Home Economics | B.A., B.S., M.S. |
| Music | B.A., M.A. |
| Physical Education | B.S., M.S. |
| School Counselor | M.S., Advanced Certificate |
| School Psychologist | M.S. in Ed. |
| Speech | B.A., M.A., M.S. |

Associate in Applied Science

Accounting Records
 Advertising
 Business Management
 Industrial Relations
 Insurance
 Merchandising
 Nursing Science
 Police Science
 Real Estate—Insurance
 Secretarial Studies

CITY COLLEGE

Bachelor of Arts (B.A.)

American Studies
 Anthropology
 Art
 Biology
 Black or Puerto Rican Studies
 Chemistry
 Classics
 Comparative Literature
 Economics
 English
 French

Geography
Geology
German
Greek
Hebrew
History
Italian
Latin
Linguistics
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Russian
Sociology
Spanish
Speech
Theatre Arts

Bachelor of Science (B.S.)

Architecture
Biology
Chemistry
Computer Sciences
Geography
Geology
Landscape Architecture
Mathematics
Nursing
Oceanography
Physics
Psychology

Bachelor of Architecture (B. Arch.)

Architecture

Bachelor of Engineering (B.E.)

Chemical
Civil

Electrical
Mechanical

Bachelor of Technology (B. Tech.)

Electro-Mechanical Technology

Bachelor of Arts—Master of Arts (B.A.—M.A.)

4-year B.A.—M.A. in English

4-year B.A.—M.A. in Mathematics

Master of Arts (M.A.)

American Studies

Art

Biochemistry

Biology

Chemistry

Classics

Comparative Literature

Creative Writing

Economics

English and/or American Literature

French

Geology

German

History

International Relations

Italian

Mathematics

Music

New York Area Studies

Philosophy

Physics

Political Science

Psychology

Russian Area Studies

Sociology

Spanish

Speech

Theatre

Master of Science (M.S.)

Computer Science

Engineering Science (Engineering Mechanics, Systems Optimization and Control, Air Pollution Control, other related interdisciplinary engineering options)

Master of Architecture (M. Arch.)

Architecture

Master of Engineering (M.E.)

Chemical

Civil

Electrical

Mechanical

Teacher Education Programs

School Administrator and Supervisor

sixth-year professional certificate

Elementary Teacher, N-6*

B.S. in Ed., M.A., M.S. in Ed.

Elementary Teacher, N-6 and:

English 7-9*

B.S. in Ed., M.A., M.S. in Ed.

French 7-9*

B.S. in Ed., M.A., M.S. in Ed.

General Science 7-9*

B.S. in Ed., M.A., M.S. in Ed.

German 7-9*

B.S. in Ed., M.A., M.S. in Ed.

Mathematics 7-9*

B.S. in Ed., M.A., M.S. in Ed.

Social Studies 7-9*

B.S. in Ed., M.A., M.S. in Ed.

Spanish 7-9*

B.S. in Ed., M.A., M.S. in Ed.

Mentally Retarded

B.S. in Ed., M.S. in Ed.

Speech and Hearing Handicapped

M.A.

Secondary Academics, 7-12

• Biology

B.A., B.S., B.S. in Ed., M.A.

Chemistry

B.A., B.S., B.S. in Ed., M.A.

Earth Science

B.A., B.S., B.S. in Ed., M.A.

English

B.A., B.S., B.S. in Ed., M.A.

French

B.A., B.S. in Ed., M.A.

German

B.A., B.S. in Ed., M.A.

Latin

B.A., B.S. in Ed.

Mathematics

B.A., B.S. in Ed., M.A.

Physics

B.A., B.S., B.S. in Ed., M.A.

* Offers specialization in teaching emotionally disturbed children. Permanent certification is in same academic field as provisional certificate.

| | |
|---------------------|-------------------------------|
| Social Studies | B.A., B.S., B.S. in Ed., M.A. |
| Spanish | B.A., B.S. in Ed., M.A. |
| Art | B.A., B.S., B.S. in Ed., M.A. |
| Attendance Teacher | B.S. in Ed., M.S. in Ed. |
| Guidance | M.S. in Ed. |
| Health | M.S. in Ed. |
| Industrial Arts | B.S. in Ed., M.S. in Ed. |
| Music | B.A., B.S., B.S. in Ed., M.A. |
| Physical Education | B.S. in Ed. |
| School Psychologist | M.S. in Ed. |
| Speech | B.A., M.A. |
| Trade Shop Subjects | B.S. in Ed., M.S. in Ed. |

MEDGAR EVERS COLLEGE

Bachelor of Arts (B.A.)

Inner-City Studies

Bachelor of Science (B.S.)

Accounting

Business

Associate in Applied Science (A.A.S.)

Nursing

Secretarial

Executive

Legal

Medical

Associate in Arts (A.A.)

Liberal Arts

Associate in Science (A.S.)

Sciences

HUNTER COLLEGE*Bachelor of Arts (B.A.)*

Accounting and Business Practice
Anthropology
Art
Biology
Black and Puerto Rican Studies
Business Education
Chemistry
Communication Sciences
East Asian Studies
Economics
Economics and Business Administration
English
English Language Arts
French
Geography
Geology
German
Greek
Health
Hebrew
History
Home Economics
Humanities
Inter-American Affairs
International Relations
Italian
Jewish Social Studies
Latin
Mathematics
Music
Philosophy
Physical Education
Physics
Political Science
Psychology
Religion
Romance Languages
Russian

Sociology
Spanish
Speech and Theatre
Statistics
Urban Studies

Bachelor of Science (B.S.)

Accounting
Community Health Education
Home Economics
Medical Computer Science
Medical Laboratory Science
Medical Records Administration
Music
Nuclear Medicine Therapy
Nursing
Physical Therapy

Bachelor of Fine Arts (B.F.A.)

Art

Bachelor of Arts—Master of Arts

History

Master of Arts (M.A.)

Anthropology
Art
Biochemistry
Biology
Chemistry
Classics
College Counseling and Student Development
Economics
English
French
Geology
German
History
Italian
Linguistics

Mathematics
 Music
 Philosophy
 Physics
 Political Science
 Psychology
 Romance Languages
 Russian Area Studies
 Sociology
 Spanish
 Speech and Theatre
 Urban Affairs

Master of Urban Planning (M.U.P.)
 Urban Planning

Master of Social Work (M.S.W.)
 Social Work

Master of Science (M.S.)
 Community Health Education
 Dance Therapy
 Environmental Health Science
 Nursing
 Nutrition
 Urban Affairs

Certificate
 Museum Administration

Teacher Education Programs

School Administrator and
 Supervisor
 Elementary Teacher, N-6
 Mentally Retarded
 Physically Handicapped
 Speech and Hearing Handicapped
 Secondary Academics, 7-12
 Biology
 Chemistry
 Earth Science
 English

sixth-year professional
 certificate

B.A., M.S. in Ed.

M.S. in Ed.

B.A., M.S., in Ed.

B.A., M.A.

B.A., M.A.

B.A., M.A.

B.A., M.A.

B.A., M.A.

| | |
|--------------------|-------------------|
| French | B.A., M.A. |
| German | B.A., M.A. |
| Greek | B.A., M.A. |
| Hebrew | B.A., M.A. |
| Italian | B.A., M.A. |
| Latin | B.A., M.A. |
| Mathematics | B.A., M.A. |
| Physics | B.A., M.A. |
| Russian | B.A., M.A. |
| Social Studies | B.A., M.A. |
| Spanish | B.A., M.A. |
| Art | B.A., M.A. |
| Commerce | B.A., M.S. in Ed. |
| Guidance | M.S. in Ed. |
| Health | B.A., M.S. in Ed. |
| Home Economics | B.S., M.S. in Ed. |
| Music | B.S., M.A. |
| Physical Education | B.A., M.S. in Ed. |
| Speech | B.A., M.S. in Ed. |

JOHN JAY COLLEGE OF CRIMINAL JUSTICE

Bachelor of Arts (B.A.)

American Studies
 Art and Languages
 Behavioral Sciences
 Black and Puerto Rican Studies
 Community Organization
 Community Relations
 Criminal Justice
 Government
 History
 Humanities
 Literature
 Social Sciences

Bachelor of Science (B.S.)

Chemistry

Criminal Justice
Criminal Justice Administration and Planning
Environmental Studies
Fire Science and Administration
Forensic Science
Mathematics
Police Science
Social Service

Master of Arts (M.A.)

Criminal Justice
Psychology
Social Relations

Master of Science (M.S.)

Forensic Science

Master of Public Administration (M.P.A.)

Public Administration

Associate in Arts (A.A.)

Liberal Arts

Associate in Science (A.S.)

Correction Administration
Police Science
Private Security

HERBERT H. LEHMAN COLLEGE

Bachelor of Arts (B.A.)

American Studies
Anthropology
Art
Biology
Black Studies
Business Education
Chemistry
Economics
English
French
Geography

Geology
German
Greek
Health and Physical Education
Hebrew
History
Home Economics
**Interdepartmental Program in Ancient Civilization of the Mediter-
 ranean and Near East**
Interdepartmental Program in Comparative Literature
Italian
Latin
Linguistics
Mathematics
Music
Philosophy
Physical Education
Physical Education (Dance)
Physics
Political Science
Psychology
Puerto Rican Studies
Romance Languages
Russian
Sociology
Spanish
Speech and Theatre

Bachelor of Science (B.S.)

Accounting
Chemistry
Home Economics
Interdepartmental Concentration in Anthropology and Biology
Music
Nursing
Physics
Recreation Education

Bachelor of Fine Arts (B.F.A.)

Art
Dance Theatre

Master of Arts (M.A.)

Art
Biology
Economics
English Literature
Fine Arts
Foreign Languages
History
Mathematics
Philosophy
Speech and Theatre

Teacher Education Programs

| | |
|--------------------------------|-------------------|
| Elementary Teacher, N-6 | B.A., M.S. in Ed. |
| Mentally Retarded | M.S. in Ed. |
| Speech and Hearing Handicapped | B.A. |
| Secondary Academics, 7-12 | |
| Biology | B.A. |
| Chemistry | B.A. |
| Earth Science | B.A. |
| English | B.A. |
| French | B.A. |
| German | B.A. |
| Hebrew | B.A. |
| Italian | B.A. |
| Latin | B.A. |
| Mathematics | B.A. |
| Physics | B.A. |
| Russian | B.A. |
| Social Studies | B.A. |
| Spanish | B.A. |
| Art | B.A. |
| Commerce | B.A. |
| Guidance | M.S. in Ed. |
| Health | B.A., M.S. |
| Home Economics | B.A. |
| Music | B.A. |
| Physical Education | B.A. |
| Recreation | B.A. |
| Speech | B.A. |

QUEENS COLLEGE***Bachelor of Arts (B.A.)***

Accounting
American Studies
Anthropology
Art
Biology
Black or Puerto Rican Studies
Chemistry
Communication Arts and Science
Comparative Literature
Computer Science
Drama or Cinema
East Asian Studies
Economics
English and Literature
Environmental Studies
French
Geography
Geology
German
Greek
Health Education
Hebrew
History
History of Art
Home Economics
Italian
Latin
Latin American Area Studies
Linguistics
Mathematics
Music
Philosophy
Physics
Political Science
Portuguese
Psychology
Russian

Sociology
Spanish
Urban Studies

Bachelor of Science (B.S.)

Accounting

Bachelor of Arts—Master of Arts (B.A.—M.A.)

4-year B.A.—M.A. in Anthropology

4-year B.A.—M.A. in Chemistry

4-year B.A.—M.A. in Music

4-year B.A.—M.A. in Philosophy

Master of Arts (M.A.)

Anthropology

Art History

Biology

Chemistry

Classics

Communication Arts and Sciences

Comparative Literature

Computer Science

Economics

English

French

Geology

German

Greek

History

Home Economics

Ibero-American Studies

Italian

Latin

Latin-American Area Studies (also leads to certificate)

Mathematics

Music

Physics

Political Science

Portuguese

Psychology

Philosophy

Sociology
Spanish
Urban Affairs

Master of Fine Arts (M.F.A.)

Painting
Sculpture

Master of Library Science (M.L.S.)

Library Science

Teacher Education Programs

School Administrator and
Supervisor

sixth-year certificate; M.A.
(Special program in Dept.
of Urban Studies)

Elementary Teacher, N-6*
Mentally Retarded

B.A., M.S. in Ed.
M.S. in Ed.

Secondary Academics, 7-12*

Biology
Chemistry
Earth Science
English
French
German
Latin
Mathematics
Physics
Social Studies
Spanish

B.A., M.S. in Ed.
B.A., M.S. in Ed.
B.A., M.S. in Ed.
B.A., M.S. in Ed.
B.A., M.S. in Ed.
B.A.
B.A.
B.A., M.S. in Ed.
B.A., M.S. in Ed.
B.A., M.S. in Ed.
B.A., M.S. in Ed.
B.A., M.S. in Ed.
B.A., M.S. in Ed.

Art

M.S. in Ed.

Guidance

B.A.

Health

(none)

Health ITTP

Home Economics

B.A., M.S. in Ed.

Music

B.A., M.S. in Ed.

Physical Education

B.S., M.S. in Ed.

Speech

B.A., M.S. in Ed.

School Psychologist

M.S. in Ed., Professional
Certificate

* Offers specialization in teaching emotionally disturbed children. Permanent certification is in same academic field as provisional certificate.

RICHMOND COLLEGE***Bachelor of Arts (B.A.)***

African Studies
Afro-American Studies
American Studies
Anthropology
Art
Comparative Literature
Dramatic Art
Economics
English
Environmental Studies
European Studies
General Humanities
History
Music
Philosophy
Political Science
Psychology
Romance Languages
Science, Letters, and Society
Sociology
Speech
Women Studies

Bachelor of Science (B.S.)

Biology
Chemistry
Engineering Science
Mathematics
Physics

Bachelor of Science in Medical Technology (B.S. in Med. Tech.)

Medical Technology

Master of Arts (M.A.)

Biological Sciences
Education
English
Environmental Science

History
 Physical Sciences
 Romance Languages
 Social Sciences

Teacher Education Programs

| | |
|-------------------------------------|-------------------------------------|
| School Administrator and Supervisor | sixth-year professional certificate |
| Elementary Teacher, N-6 | B.A., M.S. |
| Guidance | M.S. |
| Mentally Retarded | B.A., M.S. in Ed. |
| Physically Handicapped | B.A., M.S. in Ed. |
| Secondary Academics, 7-12 | |
| Biology | B.A., M.S. |
| Chemistry | B.A., M.S. |
| English | B.A., M.S. |
| French | B.A., M.S. |
| Mathematics | B.A., M.S. |
| Physics | B.A., M.S. |
| Social Studies | B.A., M.S. |
| Spanish | B.A., M.S. |

YORK COLLEGE

Bachelor of Arts (B.A.)

Anthropology
 Art
 Biology
 Chemistry
 Economics
 English
 Fine Arts
 French
 German
 History
 Italian
 Mathematics
 Music
 Philosophy
 Physical Education
 Political Science

Psychology
Sociology
Spanish
Speech

Bachelor of Science (B.S.)

Biology
Chemistry
Geology
Mathematics
Physics

Teacher Education Programs

Elementary Teacher, N-6 B.A.

Elementary Teacher, N-6 and:

English 7-9 B.A.

French 7-9 B.A.

Mathematics 7-9 B.A.

Social Studies 7-9 B.A.

Spanish 7-9 B.A.

Secondary Academics, 7-12

Biology* B.A.

Chemistry* B.A.

Earth Science* B.A.

English B.A.

French B.A.

German B.A.

Italian B.A.

Mathematics B.A.

Physics* B.A.

Social Studies B.A.

Spanish B.A.

Art B.A.

Music B.A.

Physical Education B.A.

* Includes certification in General Science.

UNIVERSITY GRADUATE CENTER***Master of Arts (M.A.)***

Classical Studies
Comparative Literature
Germanic Languages and Literature

Doctor of Philosophy (Ph.D.)

Anthropology
Biochemistry
Biology
Biomedical Sciences
Business
Chemistry
Comparative Literature
Economics
Educational Psychology
Engineering
English Literature
French
Germanic Languages and Literature
History
Linguistics
Mathematics
Music
Philosophy
Physics
Political Science
Portuguese Language and Luso-Brazilian Literature
Psychology
Sociology
Spanish
Speech
Theatre

Doctor of Social Welfare (D.S.W.)

Social Work

Appendix O

Higher Education Legislation, 1969-72

1. 1969 New York State Legislation to Higher Education

CHAPTER 76 amends section 355 to require the inclusion in the curricula of State-operated institutions in the State University for professional education in medicine; and, in the master plan of the Trustees of the State University, courses and facilities which include the establishment and maintenance of a department of general practice; and other facilities to implement the study and preparation by students desiring the same for the general practice of medicine.

General
Practice
of
Medicine

CHAPTER 173 amends sections 6215²¹ and 6216²² to make procedural changes in connection with the budget process of The City University of New York.

The City
University

CHAPTER 174 amends section 6304²³ to require the approval of the State University trustees of cost of community colleges as a prerequisite to the computation of state financial aid to such institutions, with limitations and regulations as to such costs to be prescribed by the State University trustees with the approval of the Director of the Budget.

Community
Colleges

CHAPTER 191 enacts a new Article 129-A (section 6450) entitled "Regulation by Colleges of Conduct on Campuses and Other College Property for Educational Purposes."

Conduct on
Campuses

²¹ Section 6215 was also amended in 1970.

²² Section 6216 was also amended in 1971.

²³ Section 6304 was also amended in 1970.

The new article requires the adoption by the governing body of each institution of higher education of rules and regulations for the maintenance of public order on college campuses and other college property, and requires the institution to provide a program for the enforcement thereof. The rules and regulations must be filed with the Regents and the Commissioner of Education not later than 90 days after the effective date of the act, and amendments must be filed within 10 days after their adoption.

Failure to file the rules and regulations within the time required would make the institutions ineligible to receive any state aid or assistance until rules are filed. The 90-day period for filing such rules will expire July 20, 1969.

CHAPTER 265 changes the name and purpose of the New York State College of Home Economics to be the New York State College of Human Ecology, and provides that the object of the college shall be the improvement of family well-being and home welfare by means of education, research, extension teaching, and related public service in the fields of human development and the use of human and environmental resources including consumer economics, family relationships, human nutrition, household design, and allied subjects.

NYS College
of
Human
Ecology

CHAPTER 341 amends the Penal Law²⁴ to make the possession of firearms in a college, school, or university building or on the grounds of such institution without the written authorization by the institution, a misdemeanor or a class D felony if previously convicted of any crime, and makes certain revisions of the law with respect to the crime of criminal trespass in the case of persons knowingly entering and unlawfully re-

Firearms on
Campus

²⁴ Subdivision 10 of section 265.05 of the Penal Law was further amended in 1971.

maing in a building when in possession of a firearm or knowingly in the company of other persons possessing firearms. This crime is defined as a class D felony.

CHAPTER 434, amending section 653b ²⁵, changes the program of the New York Higher Education Assistance Corporation by permitting the deferment of repayments by student borrowers for a maximum period of 3 years while the student is a member of the Armed Forces, the Peace Corps, or VISTA.

Higher
Education
Assistance
Corporation

CHAPTERS 467 and 469 amend sections 652 and 653a ²⁶ in relation to the New York Higher Education Assistance Corporation in order to comply with changes made in federal programs providing assistance to students in higher education institutions.

Higher
Education
Assistance
Corporation

CHAPTER 771 adds a new Article 10-D (sections 475-479) entitled Regional College Cooperative Services Board. The Commissioner of Education is authorized upon application of two or more nonpublic institutions of higher education and upon his determination that such action will strengthen the educational resources within the area to be served to initiate proceedings for the establishment of such a board. If a majority of the institutions of higher education in the area, by majority vote at a meeting at which the governing board of each institution has one vote, shall so determine, such voting bodies shall elect trustees who shall apply to the Regents for a charter as a Regional College Cooperative Services Board. The function of the board is to formulate a plan to provide for joint or cooperative programs, services, and arrangements including

Regional
College
Cooperative
Services
Board

²⁵ Section 653b was further amended in 1972.

²⁶ Section 653a was further amended in 1970 and 1972.

but not limited to faculty or administrative staff, use of library, television research and laboratory facilities, and the granting of credit for courses of study leading to a degree. The Commissioner is directed by regulation to provide standards for Regional Boards and the Commissioner is likewise required to review the plans of such boards at least every 3 years.

CHAPTER 875 authorizes the town of Lake George, Warren County to lease certain town lands to the Atmospheric Science Research Center of the State University of Albany.

Lake George

CHAPTER 1077, effective April 1, 1969 for programs beginning after June 1, 1969, adds a new Article 130²⁷ to the education law entitled Opportunity for Higher Education. The Commissioner of Education is authorized to contract with public and nonpublic institutions of higher education for the support of special programs for screening, testing, counseling, and tutoring of graduates of approved high schools, or individuals who have attained high school equivalency diplomas, who have potential for the successful completion of post-secondary programs, and who are economically and educationally disadvantaged.

HEOP

CHAPTER 1117 creates a temporary state commission²⁸ to study and investigate the causes of unrest and violence on college campuses.

Campus
Unrest

CHAPTER 1154 recodifies and simplifies the provisions of the education law in relation to scholar incentives, scholarships, and fellowships.

Student Aid

²⁷ Article 130 (section 6451) was amended in 1970 and 1972 and section 6452 was added in 1970.

²⁸ Continued in 1970, 1971, and 1972.

A new Article 13²⁹ (sections 601-639) is enacted. The substantive changes in addition to simplification include provision for:

- a. The use of Regents College Scholarships for 5 years.
- b. The use of basic nursing scholarships for 5 years.
- c. Scholar Incentive Assistance to students in hospital nursing schools.
- d. Scholar Incentive Assistance to students in 2-year registered private business schools.
- e. Concurrent use of U. S. war orphan benefits and scholar incentive assistance.
- f. Three hundred additional war service scholarships raising the total to 600.
- g. The promulgation by the Regents of academic eligibility standards for scholar incentive assistance.
- h. The requirement of United States citizenship for scholar incentive assistance, conforming to state scholarship provisions.
- i. The elimination of Regents college scholarship examinations abroad.
- j. The use of basic nursing scholarships in either collegiate or hospital nursing programs.
- k. Allocation of basic nursing scholarships and war service scholarships on the basis of population rather than assembly districts provided, however, that each assembly district is guaranteed the same number of basic nursing and war service scholarships that it has at present.

The major change contained in this proposal affects the formula by which college students receive scholar incentive assistance.

At present all students are eligible for scholar incentive assistance, regardless of income level. This chapter will gradually phase in a new formula which would eliminate the minimum award for higher income undergraduate students. Undergraduates who are now receiving the mini-

²⁹ Sections 613 and 614 were amended in 1970, 1971, and 1972; sections 622, 630, 631, 635, 636, and 639 were repealed in 1971; section 620 was amended and 627-a added in 1971.

mum award will continue to do so until they receive their bachelor's degrees.

In the 1969-70 school year and in subsequent school years, beginning freshmen in those cases where the net taxable balance of family income is in excess of \$20,000 will not receive scholar incentive assistance. In the 1970-71 school year those new students with family incomes under \$8,000 will receive \$100 more than similar students now receive. Students with parental incomes between \$8,000 and \$20,000 will continue to receive \$100.

Beginning with the 1970-71 school year and for the following 3 school years, the new scholar incentive formula will be applied to an additional group of incoming freshmen students. Thus, by 1974-75 all students will be on the new formula.

Beginning with the 1969-70 school year, graduate students will be eligible to receive scholar incentive assistance on the new formula. Graduate students with incomes over \$20,000 will not receive assistance and all other graduate students will receive less money than they now receive.

2. *1970 New York State Legislation Relating to Higher Education*

CHAPTER 16 amends subdivision 1 of section 807-b³⁰ of the Education Law to include fraternity and sorority buildings under the jurisdiction of the college in the list of buildings which the college must cause to be inspected.

Fire
Inspection
of Fraternity
and Sorority
Buildings

CHAPTER 163 amends subparagraph (1) of paragraph C of subdivision 1 of section 6215 of the Education Law relating to the City University of New York, to provide for State aid on the amount of city capital authorizations for the purchase of library books, educational equipment,

Aid to
New York
City Board of
Higher
Education

³⁰ Section 807-b was further amended in 1971.

office equipment, and other minor capital expenditures.

CHAPTER 313 amends subdivision 2 of section 378 of the Education Law to remove the requirement that construction, acquisition, reconstruction, rehabilitation, or improvement be completed before the leasing of property by the Dormitory Authority to the State University may commence.

Dormitory
Leasing

CHAPTER 387 adds a new section 666-a to the Banking Law prohibiting banks and bankers from requiring persons making application for loans guaranteed by the New York State Higher Education Assistance Corporation to be depositors.

H.E.A.C.
Loans

CHAPTER 451 amends subdivision 1 of section 613³¹ and subdivisions 1 and 3 of section 614³¹ of the Education Law to extend eligibility for children of veterans scholarships to children of persons serving in the armed forces of the United States through July 1, 1971 and to add 600 veterans scholarships to be awarded for the school year 1970-71.

Children of
Veterans and
Veterans
Scholarships

CHAPTER 659 amends section 228 of the Education Law to increase the maximum remuneration to be paid to Hamilton College Sewer Districts Commissioners to \$15.00 a day.

Hamilton
College
Sewer District
Commissioners

CHAPTER 811 amends section 6304 to increase from $\frac{1}{3}$ to 40% the State's share of the operating costs of those community colleges implementing programs of full opportunity for high school graduates and returning veterans. The sponsor's share of capital costs is also reduced from $\frac{1}{3}$ to $\frac{1}{4}$.

Community
College
Programs of
Full
Opportunity

CHAPTER 874 amends paragraph a of

Dormitories

³¹ Sections 613 and 614 were further amended in 1971 and 1972.

subdivision 3 of section 1680³² of the Public Authorities Law to permit the Dormitory Authority to make loans for reconstruction, rehabilitation, and improvement, or otherwise providing, furnishing, and equipping of dormitories and existing attendant facilities with provision for computation of payment of any expenses of the authority in addition to other items.

CHAPTER 898 amends the section heading of section 653-a³³ of the Education Law to include "special allowances" and adds a new subdivision 4 to such section to require a premium to be paid to lending institutions making guaranteed loans to persons attending schools not recognized by national accrediting agencies but approved by the Board of Regents. Most of these schools are trade schools or nursing schools.

Special
Allowances
of H.E.A.C.
Loans

CHAPTER 917 amends section 6451³⁴ of the Education Law and adds a new section 6452 to such law. After July 1, 1970, section 6451 will relate to opportunity for higher education in private colleges and section 6452 will relate to such programs in the State University of New York and the City University of New York. The sum of \$6,902,000 is appropriated for the State University, \$9,000,000 for the City University and \$4,000,000 for private colleges. Of the funds appropriated to the City University \$7,000,000 requires matching by real estate taxes and general fund revenues of the City of New York. Developmental and compensatory courses are added purposes. Supplemental financial assistance under section 6451 is to be furnished pursuant to criteria promulgated by the Commissioner of Education with the approval of the Budget Director

Higher
Education
Opportunity
Programs

³² Section 1680 was further amended in 1972.

³³ Section 653-a was amended in 1972.

³⁴ Section 6451 was amended in 1972.

and under section 6452 pursuant to criteria promulgated by the Universities and approved by the Regents and the Budget Director.

CHAPTER 19 amends chapter 1117 of the Laws of 1969 to continue the Temporary State Commission to Study and Investigate the Causes of Unrest and Violence on College Campuses until March 31, 1971³⁵ and to extend its scope to secondary schools.

Programs
Temporary
State
Commission
on State
Campus
Unrest

3. 1971 New York State Legislation Relating to Higher Education

CHAPTER 118 repeals section 12 of chapter 782 of the Laws of 1966 (an unconsolidated law), which created the Chancellor's Fund for City University Projects and transfers any assets to the State Purposes Fund of the General Fund of the State Treasury.

Chancellor's
Fund
Repealed

CHAPTER 121 repeals sections 622, 630, 631, 635, 636 and 639 of the Education Law which provided certain fellowships. Fellowships awarded prior to the 1971 series are not affected.

Fellowships
Repealed

CHAPTER 127 amends sections 613 and 614³⁶ of the Education Law to create 600 scholarships for veterans to be awarded in 1971-72 and to make veterans eligible who have served between October 1, 1961 to July 1, 1971 and to provide for eligibility for children of veterans scholarships where parents served through July 1, 1972.

Scholarships
for Veterans
and Children
of Veterans

CHAPTER 135 repeals article 116 of the Education Law and amends subdivision 3 of section 352 to add a State College of Optometry in the State University of New York.

State College
of Optometry

³⁵ The commission was continued in 1971 and 1972.

³⁶ Sections 613 and 614 were amended in 1972.

CHAPTER 264 amends section 807-b of the Education Law to exempt from the requirements of dates for fire inspections buildings under the jurisdiction of a public college and regularly inspected by the State Division of Fire Safety and to change references to certain corporations and to exempt specifically from the provisions of such section colleges in the cities of New York, Buffalo, Rochester, Syracuse, Yonkers, and Albany.

**College Fire
Inspections**

CHAPTER 964 amends section 620 of the Education Law to add a new Regents scholarship for professional education in medicine, and adds a new section 627-a to require that 30% of the professional scholarships in medicine provided by section 625 shall be awarded to students agreeing to practice in areas designated by the Regents, after consultation with the Commissioner of Health, as having shortages of physicians.

**Regents
Scholarships
for
Professional
Education
in Medicine**

CHAPTER 975 amends section 6206 of the Education Law to substitute the term "college laboratory technicians" for certain other titles appearing in such sections as positions under the Board of Higher Education.

**College
Laboratory
Technicians**

CHAPTER 1160 amends section 218 of the Education Law to except institutions seeking authority to confer associate degrees from the requirements of resources of at least \$500,000 and requiring such institutions to possess financial resources deemed adequate by the Regents.

**Associate
Degree
Granting
Institutions**

CHAPTER 1167 amends subdivisions (g) and (1) of section 35 of the Civil Service Law to require the Commissioner of Education and boards of trustees of community colleges to certify qualifications for appointment of teachers to the Civil Service Commission.

**Certification
to Civil
Service
Commission**

CHAPTER 610 amends chapter 1117 of the Laws of 1969,³⁷ re-entitled by chapter 19 of the Laws of 1970, to permit findings by March 1, 1972 and a report by March 31, 1972 and to continue the Temporary State Commission on Campus Unrest until May 1, 1972, and appropriate \$75,000 for the purposes of the commission.

Temporary
State
Commission
on Campus
Unrest
Extended

CHAPTER 359 amends subdivision 10 of section 265.05 of the Penal Law to except from the provisions making it illegal to possess firearms on lands of schools, colleges, and universities, the lands owned by the State University College of Forestry at Syracuse.

Firearms on
Lands of
State College
of Forestry

CHAPTER 370 amends, *inter alia*, section 387 of the Education Law to permit the Governor to authorize the Director of the Budget to approve the terms of rentals by the State University Construction Fund.

SUCF
Rentals;
Approval by
Director of
Budget

CHAPTER 567 amends sections 237, 354, and 6202 of the Education Law relating to the preparation and scheduling of the Master Plan for Higher Education in this State.

Master Plan
for Higher
Education

CHAPTER 611 amends sections 392 and 6252 of the Education Law to require employers to make retirement contributions for employees of community colleges in the City of New York and for employees who are members of the Board of Higher Education Optional Retirement Program from July 1, 1971 through June 30, 1972.

Retirement
Contributions
for Some
Employees
in New York
City

CHAPTER 681 amends sections 6216 and 6305 of the Education Law to provide for payment by the counties of the county share for students attending community colleges in another county and increasing from \$100 to \$300 the

Community
College Costs

³⁷ The commission was continued in 1972.

amount that may be charged per student for capital costs. Section 3 of this chapter is an unconsolidated law providing for repayment of State advances to county sponsors billed in 1971 and 1972.

CHAPTER 746 amends section 5703³⁸ of the Education Law to add the Temporary President of the Senate as an *ex officio* trustee of Cornell University and to delete as an *ex officio* trustee the librarian of the Cornell Library of the City of Ithaca, to provide for election of 21 trustees at large, to alter the time schedule for nomination of alumni trustees, to limit the right to serve as an alumni trustee, to provide for 6 faculty trustees and 5 student trustees, to change the minimum age of trustees to 18, and to set the quorum at 20.

CHAPTER 747 adds a declaration of legislative intent to chapter 746 which requires participation by 40% of the constituencies (faculty or student) in order to constitute a valid election.

CHAPTER 833 amends sections 5712 and 5713 of the Education Law to change the name of the New York State College of Agriculture to the New York State College of Agriculture and Life Sciences.

CHAPTER 843 enacts an unconsolidated law authorizing the Commissioner of General Services to sell certain land in the Village of Canton to St. Lawrence University upon such terms and conditions as he may fix and determine with the approval of the Director of the Budget. Application must be made within 1 year.

4. 1972 New York State Legislation Relating to Higher Education

CHAPTER 129 amends subdivision 1 of

Cornell
University
Trustee

Chapter
Amendment
to Chapter
747

New York
State College
of Agriculture
and Life
Sciences

Land
Transfer
Authorized

Children of

³⁸ Section 5703 was amended in 1972.

section 613 of the Education Law to extend eligibility to otherwise eligible children of veterans who served from July 1, 1972, through July 1, 1973, in the armed services. Subdivisions 1 and 3 of section 614 of the Education Law are also amended to create 600 new veterans' scholarships to start in the 1972-73 college year and to extend eligibility to not other than honorably discharged veterans who served in the armed forces between October 1, 1961, and July 1, 1972.

Veteran
Awards and
Veterans'
Scholarships

CHAPTER 139 amends subdivisions (1) and (2) of section 6279 of the Education Law to change both State and city payments to the City University Construction Fund so that 50 percent of each such payment is to be made on or before July 15 and the other 50 percent on or before May 15. If the city fails to make such payment, the State Comptroller is to deduct the required amount from the next succeeding payment of per capita aid under the provisions of section 54 of the State Finance Law.

Schedule of
State and
City
Payments to
City
University
Construction
Fund

CHAPTER 148 adds a new section 362 to the Education Law empowering the Board of Trustees of the State University of New York to adopt rules for the control and regulation of pedestrian and vehicular traffic and parking. Notice of such rules is to be filed in the office of the Secretary of State and in the office of the clerk of the city, town, or village where they may be enforced and in the office of the campus security director or such other locations as may be designated by the campus chief administrative officer. Uniform traffic summons and complaints may be issued.

Regulation of
Traffic and
Parking by
State
University
Board of
Trustees

CHAPTER 149 amends subdivision 3 of section 6451 of the Education Law to permit payment of partial reimbursement for tuition for regular academic courses pursuant to criteria pro-

Partial
Tuition
Reimburse-
ment

mulgated by the Commissioner of Education for students attending nonpublic institutions.

CHAPTER 234 amends sections 2401, 2402, 2404, and 2405 of the Public Authorities Law and adds a new section 2405-a to such law and amends sections 651-a, 653, 653-a, and 653-b of the Education Law with respect to loans to students attending post-secondary institutions. The chapter authorizes the State Mortgage Agency to make loans to students and to purchase loans made to such students for the purpose of paying tuition, educational fees, and room and board. The amount of eligibility for loans is reduced by payments under Article 13 of the Education Law and any other direct financial aid the borrower is not required to repay. Also, the amount of family income shall no longer be a reason for the NYHEAC to refuse to guarantee a loan.

CHAPTER 261 amends section 1677 of the Public Authorities Law to provide that the four members of the Dormitory Authority presently appointed by the Board of Regents shall instead be appointed by the Governor and that the Director of the Budget shall take the place of the Chancellor of the State University on such board. Board members now serving are continued until expiration of their terms.

CHAPTER 280, section 5 adds a new section 616 to the Education Law to provide Regents college awards for children of deceased State correction officers and civilian employees who died as a result of the Attica prison riot in September 1971. The award is to be for 4 years (or 5 for 5-year programs) and is not to exceed the sum of tuition, educational fees, room, and board charged by the State University as established by the Commissioner of Education. The award may not be used concurrently with other benefits.

for HEOP
Students
New York
State
Mortgage
Agency;
Student
Loans

Reorganiza-
tion of
Dormitory
Authority
Board

Awards for
Children of
State
Correction
Officers and
Other
Correction
Employees
Killed in
Attica
Prison Riot

CHAPTER 383 amends paragraph m of subdivision 2 of section 355 of the Education Law to authorize the Board of Trustees of State University of New York to appoint security officers and peace officers for SUNY. Such amendment empowers persons so appointed to have the powers of police officers and the right to issue simplified traffic information. Conforming amendments are made to subdivision 5 of section 1.20 and subdivision 2 of section 100.10 of the Criminal Procedure Law.

Appointment
of Peace
Officers for
SUNY

CHAPTER 387 amends the Education Law and several other laws to change the name of the New York State College of Forestry at Syracuse University to the State University of New York College of Environmental Science and Forestry and updates the provisions relating to operation of such institution. Sections 6001, 6002, 6003, 6004, and 6005 of the Education Law are repealed and replaced with sections with the same numbers.

State
University of
New York
College of
Environmental
Science
and Forestry

CHAPTER 463 enacts an unconsolidated law authorizing The City University Construction Fund to acquire the University Heights Campus of New York University for the use of the Bronx Community College, and requiring the merger of the New York University School of Engineering and Science with Polytechnic Institute of Brooklyn.

University
Heights
Campus;
Polytechnic
Institute of
Brooklyn

CHAPTER 464 amends portions of the Public Authorities Law, the State Finance Law, and the Education Law to provide for the Dormitory Authority to build community college facilities and to provide for financing such construction.

Dormitory
Authority
Authorized
To Build for
Community
Colleges

CHAPTER 465 amends subdivision 1 of section 1680 and paragraph (d) of subdivision 9 of section 1680 of the Public Authorities Law to

Dormitory
Authority
Authorized

permit the Dormitory Authority to construct facilities for community colleges sponsored by the Board of Higher Education of the City of New York or the Board of Education of the City of New York.

CHAPTER 584 amends subdivision 2 of section 5703 of the Education Law to remove the provision that trustees of Cornell University shall hold over until their successors are elected or appointed.

CHAPTER 698 adds a new category of college awards to those provided by Education Law section 613. The section now provides for awards to children of certain deceased and disabled veterans. The new category consists of children of prisoners of war and of persons missing in action. This bill further extends the period of the Southeast Asian hostilities for the purposes of section 613 to July 1, 1973. (Such extension was already effected by L. 1972, ch. 129.)

CHAPTER 860 adds a new subdivision 8 to section 6306 of the Education Law to authorize boards of trustees of community colleges to participate in cooperative educational programs, services, and arrangements with the approval of the local sponsor and pursuant to regulations of the State University trustees with the approval of the Director of the Budget.

CHAPTER 349 amends chapter 1117 of the Laws of 1969 to change the name of the Temporary State Commission to Study and Investigate the Causes of Unrest and Violence on College Campuses and in Secondary Schools to the

To Build for
Community
Colleges of
Board of
Higher
Education
and Board of
Education of
New York
City

Trustees of
Cornell
University

College
Awards for
Children of
Prisoners of
War and of
Persons
Missing in
Action

Participation
in
Cooperative
Educational
Programs,
Services, and
Arrangements

Temporary
State
Commission
to Study and
Investigate

Temporary State Commission to Study and Investigate the Causes of Educational Unrest and Violence, and to provide for reports to the Governor and the Legislature on March 1, 1973, and March 31, 1973, and for the commission to continue until May 1, 1973. The amendment also removes the restriction of the scope of the inquiry to college campuses and secondary schools and requires investigation of the reasons for incidents.

the Causes of
Educational
Unrest and
Violence

5. 1969 New York State Legislation Affecting the Professions

General

CHAPTER 130 amends section 211 to authorize the Regents to delegate to Education Department officers the disposition of applications in licensing matters pursuant to rules duly adopted by the Regents.

Disposition of
Applications

Chiropractic

CHAPTER 737 amends section 6552 to delete the subject of hygiene from the licensing examination in chiropractic and to change bacteriology to microbiology. The amendment requires the Education Department to prepare questions for the basic subjects instead of using the questions prepared for the same subject in the medical licensing examination.

CHAPTER 856 amends section 6551 to permit readmission to the chiropractic licensing examinations after January 1, 1968 of applicants who have graduated from chiropractic school or college and possessed qualifications meeting the requirements of the section prior to that date.

Nursing

CHAPTER 58 renumbers sections 6923 and 6922 and amends that section which authorizes the Commissioner of Education to make contracts with hospitals for continuing education of

Continuing
Education

nurses to include contracts with public hospitals and to delete the requirement that registered professional nurses have been out of active practice for five or more years to be eligible for such courses.

CHAPTER 693 adds a new section 6921³⁹ to authorize the Commissioner of Education to make contracts with voluntary nonprofit or municipal hospitals or with duly chartered institutions of higher education in the State under which such hospital or institution shall provide courses in nursing to foreign trained nurses who have applied for license in this state as registered professional nurses.

Foreign
Trained
Nurses

Optometry

CHAPTER 832 amends the Insurance Law to permit the inclusion of optometric care in group medical expense indemnity coverage.

Pharmacy

CHAPTER 230 amends section 6809 to conform the State requirements with Federal requirements concerning the manufacture and use of new drugs.

Podiatry

CHAPTER 789 inserts in section 7001 a new definition of the scope of practice of podiatry. Such practice is defined as holding oneself out as able to and diagnosing, treating, operating, and prescribing for any disease, injury, deformity, or other condition of the foot including surgery on the bones, muscles, or tendons of the feet for the correction of minor deficiencies and deformities of a mechanical and functional nature. The treatment of fractures shall be limited to simple and uncomplicated fractures of the bones of the foot. The use of anesthesia shall be

³⁹ Section 6921 was amended in 1970.

limited to local anesthetics for therapeutic purposes, as well as for anesthesia, and the right to use nonnarcotic postoperative sedatives, but this shall not be construed as prohibiting the treatment of a patient who is under general anesthesia. The scope of such practice is limited by a provision that it shall not confer the right to treat any other part of the human body nor shall it be construed as permitting treatment of fractures of the malleoli or cutting operations upon the malleoli.

CHAPTER 393 authorizes the Education Department, with the approval of the State Board of Psychology Examiners, to accept in lieu of the examination given by such board full or partial credit for satisfactory passing of comparable examinations given by a board of examiners of another state, a province of Canada, the American Association of State Psychology Boards, or the American Board of Examiners in Professional Psychology.

Out-of-State Examinations

Psychology

CHAPTER 1042 amends section 7605⁴⁰ to permit the issuance of a temporary permit for the practice of psychology for a period of 18 months, instead of 1 year as under the previous law, and provides that such permit may be issued to an applicant whose qualifications have been approved for admission to the psychology certification examination, provided that such applicant has resided in the State for not more than 6 months prior to the filing of such application and provided further that such applicant possess a certificate or license as psychologist granted by another state or country which is satisfactory to the Board of Psychology Examiners.

⁴⁰ Section 7605 was further amended in 1970.

6. 1970 New York State Legislation Affecting the Professions

CHAPTER 11 amends section 626 of the Education Law to provide that county awards for professional education in medicine may be granted for attendance at any approved medical or dental school within the United States rather than only within the State.

Medical
and Dental
Scholarships

CHAPTER 96 amends subdivision 6 of section 6556 of the Education Law to extend until July 1, 1972 the time within which applications may be filed for a chiropractic license under section 6556 by applicants who were students in a residence course in chiropractic on April 1, 1963.

Chiropractic
Licensure

CHAPTER 127 amends the definition of a justifiable abortifacient act in section 125.05 of the Penal Law to authorize voluntary abortions within 24 weeks from the commencement of pregnancy. Such abortions must be performed by a duly licensed physician or by the pregnant female herself.

Abortions

CHAPTER 361 amends section 2305 of the Public Health Law to permit a physician to diagnose, treat, or prescribe for a case of venereal disease in a person under the age of twenty-one without the consent or knowledge of the parents or guardian.

Treatment of
Venereal
Disease

CHAPTER 406 authorizes the Education Department to waive the citizenship requirement for applicants for admission to the examination for licensure in medicine.

Citizenship
Requirement
in Medicine

CHAPTER 596 amends section 6513 of the Education Law to provide that members of the medical staff of a hospital serving on a hospital utilization committee for the purpose of evaluating and improving the quality of hospital care shall not be liable for damages for any action or

Hospital
Utilization
Committees

recommendation made without malice and warranted by the facts known to said medical staff member.

CHAPTER 779 amends section 7605 of the Education Law to require that an applicant for certification as a professional psychologist possess a doctoral degree in psychology based on a program registered by the Education Department, or the substantial equivalent thereof. The statute previously required only a doctoral degree based on a program whose content was primarily psychological, or the substantial equivalent thereof.

Psychology
Doctoral
Requirement

CHAPTER 781 amends section 6921 of the Education Law by extending the authority of the Commissioner to make contracts for courses in nursing for foreign-trained nurses to include contracts with public hospitals as well as with municipal hospitals and voluntary nonprofit hospitals.

Contracts for
Nursing
Courses for
Foreign-
Trained
Nurses

CHAPTER 856 adds a new section 6609-a to the Education Law providing for the admission to the dental licensing examination of foreign dental graduates holding doctorate degrees in dental medicine or dental surgery who have completed the requisite undergraduate study; who have obtained a diploma or degree in dentistry; and who have been licensed in a foreign country. The new section also provides for the issuance by the Department of a limited permit, valid for a period of 3 years, to a graduate of a dental college who meets the educational requirements for admission to the licensing examination. Such permit would authorize the holder to practice dentistry only under the direction or supervision of a licensed dentist and only while employed in a hospital or dental facility.

Foreign
Dental
Graduates

CHAPTER 940 appropriates \$2,100,000 for the first half year of a program of annual grants of \$1,500 for each full-time matriculated

Financial Aid
to Medical
Schools

student to eligible nonpublic institutions of higher education offering an approved program leading to an M.D. degree.

CHAPTER 974 amends the Business Corporation Law and the Tax Law to provide for the incorporation of professional service corporations. All shareholders, officers, and directors of such corporations must be licensed to practice the profession involved. A certificate to this effect must be obtained from the licensing authority (the four Appellate Divisions in the case of the practice of law, and the Education Department in the case of all other licensed professions) and must be submitted to the Department of State with the certificate of incorporation. The professional corporation may render professional services only through licensed professionals, who are liable as individuals for their professional acts. The certificate of incorporation is subject to revocation in the same manner as an individual license. Professional service corporations may practice law or any of the professions licensed or certified by the Board of Regents or the Education Department, but interdisciplinary corporations may be formed only for the practice of professional engineering, architecture, landscape architecture, and land surveying. This chapter does not alter the status of existing professional corporations, or preclude the organization of professional corporations under any other provisions of law.

Professional
Service
Corporations

CHAPTER 979 adds a new article 116⁴¹ to the Education Law providing for the establishment in the State University of the New York State College of Optometry; establishing a board of trustees of said college under the supervision of the State University trustees; and providing for the powers and duties of said board of trustees.

College of
Optometry

⁴¹ Article 116 was repealed in 1971.

CHAPTER 985 amends section 7609 of the Education Law, effective July 1, 1970, to exempt the activities, services, and use of official title of employees of a duly chartered elementary school, secondary school, or degree granting educational institution from the provisions of Article 153 of the Education Law, which provides for the certification of psychologists and regulates the practice of psychology.

Psychology-
Exemption of
School
Psychologists

CHAPTER 1010 adds a new subdivision 13 to section 6612 of the Education Law providing that dentists shall not be liable for damages for the injury or death of patients to whom they render first aid or emergency treatment at the scene of an accident unless such injury or death is caused by gross negligence on the part of the dentist.

Dentists
Emergency
First Aid

7. 1971 New York State Legislation Affecting the Professions

CHAPTER 135 repeals Article 116 of the Education Law, which provided for the establishment in the State University of the New York State College of Optometry and establishes detailed provisions concerning its operation, and amends section 352 to include an optometry college in the State University.

State
University
College of
Optometry

CHAPTER 242 amends subdivision 4 of Section 568 of the Real Property Tax Law relating to the preparation of tax maps by a city, town, village, or county to specifically provide that such maps need not be prepared by or under the direction of a licensed land surveyor except where ground surveys or the determination of control points for photogrammetric surveys are required.

Land
Surveying-
Tax Maps

CHAPTER 294 amends the Social Services Law to allow physicians and other medical per-

Child Abuse

sonnel to make photographs of the visible areas of trauma of children suspected of having been abused.

CHAPTER 556 amends section 6907⁴² of the Education Law to extend from 30 to 90 days the duration of temporary permits for the practice of registered professional nursing and licensed practical nursing following completion of a program in nursing.

Temporary
Permits in
Nursing

CHAPTER 725 amends the Public Health Law to add a new Article 44 prohibiting medical referral service businesses.

Medical
Referral
Services

CHAPTER 878 amends the General Business Law to make it unlawful for any person or corporation to furnish a report of a referral for abortifacient services except to a law enforcement agency.

Abortifacient
Referral
Services

CHAPTERS 982 and 983 amend the Insurance Law to include chiropractic care provided through a duly licensed chiropractor within those services for which a medical expense indemnity corporation may reimburse a subscriber, and further provide that whenever a health insurance policy provides for reimbursement for any service which is within the lawful scope of the practice of a duly licensed chiropractor, a subscriber to such policy shall be entitled to reimbursement for such service performed by a duly licensed chiropractor.

Insurance
Benefits
for
Chiropractic
Services.

CHAPTER 984 amends the Town Law to authorize town boards to contract on an annual basis for the services of a licensed physician to render medical care and treatment to the inhabitants of the town.

Contracts by
Towns for
Medical
Services for
Residents

CHAPTERS 987 and 994 comprise a re-

Recodifica-

⁴² Section 6907 was amended and renumbered in 1972.

codification of the provisions of the Education Law providing for the licensing or certification of the various professions. All of the existing statutes are repealed, and the recodification is substituted. The general provisions relating to the establishment of licensing boards and the licensing and supervision of the professions are contained in an omnibus article applicable to all of the professions. In addition, the special statutory provisions are contained in a separate article for each of the professions. This law was intended primarily as a recodification of existing law. Few substantive changes are made. The basic recodification is contained in Chapter 987. Chapter 994 makes a number of technical corrections.

CHAPTER 988 amends Chapter 987 to require applicants for licensure as certified public accounts to pass a written examination.

CHAPTERS 989 and 990 amend the Education Law to include dentists within the protection against liability for members of utilization committees. These laws also prohibit disclosure proceedings in connection with the proceedings and records of such utilization committees. No person in attendance at a committee meeting may be required to testify as to what transpired, unless that person is a party to an action which was reviewed at such a meeting.

CHAPTER 991 amends Chapter 987 relating to the practice of chiropractic to continue the provision of existing law prohibiting chiropractors from using diagnostic or therapeutic methods involving chemical or biological means, or utilizing any electrical devices not specifically approved by the State Board of Chiropractic Examiners.

CHAPTER 992 amends new section

tion of the
Professional
Licensing
Statutes

Written
Examination
in Certified
Public
Accounting

Hospital
Utilization
Committees

Chiropractic
—Use of
Devices

Definition of

6810⁴³ of the Education Law to exclude from the definition of prescription required drugs, within the meaning of the pharmacy article, any soft or hard contact lenses, eyeglasses or other devices for the aid of vision.

Prescription
Required
Drugs

CHAPTER 993 amends the definition of the practice of engineering contained in Chapter 987 to specifically include professional services relating to "buildings," "machines," or "works."

Definition of
Practice of
Engineering

CHAPTERS 995 and 1109 amend the Education Law provisions defining "utilization committees" to include committees of any local, county or state medical or dental society reviewing the quality of care in a hospital or extended care facility or a dispute between a physician or dentist and a patient concerning professional services or fees.

Medical
Utilization
Committees
of Medical
and Dental
Societies

CHAPTERS 997, 998 and 999 amend the Public Health Law and the Education Law to authorize podiatrists to obtain a special certificate from the Department of Education and a Federal narcotic tax stamp. Such podiatrists may thereafter administer or prescribe narcotic drugs.

Podiatrists—
Use of
Narcotics

CHAPTERS 1135 and 1136 amend the Education Law and the Public Health Law to provide for the training, registration, and supervision of two new categories of health personnel, to be known as "physician's associates" and "specialist's assistants." They will work under the general supervision of licensed physicians. No physician may employ more than two such persons, and they may not be employed to perform functions specifically delegated to other health professions or specialties licensed or registered by the State Education Department or the Department of Health. The operating provisions of these chap-

Physician's
Associates
and
Specialist's
Assistants

⁴³ Section 6810 was amended in 1972.

ters are effective April 1, 1972, but the necessary preparations for implementation and the appointment of an advisory council may take place before that date.

CHAPTER 1139 amends several laws including the Public Health Law and the Education Law to authorize the establishment of nonprofit medical corporations by three or more physicians for the purpose of conducting a group practice of medicine and to provide health services in connection with a prepaid comprehensive health care plan. These nonprofit medical corporations are granted preferred tax status and are made eligible for loans to cover the cost of their establishment and are allowed to finance their capital facilities in a manner similar to a hospital. No physician who is a member or employee of such a corporation may be compensated for practicing medicine except on behalf of the corporation. A certificate from the Health Department is required to incorporate, but the general requirements of the Education Law would still apply to the corporation and the individual physicians and each physician is personally liable for any negligent act committed by him or under his supervision.

Nonprofit
Medical
Corporations

CHAPTER 1211 amends the Insurance Law to provide that when a policy provides for reimbursement for treatment by a physician or psychiatrist, the insured may also be entitled to reimbursement for treatment by a certified psychologist.

Insurance
Benefits for
Psychological
Services

8. *1972 New York State Legislation Affecting the Professions*

CHAPTER 50 amends and renumbers former sections 6901-6908 of the Education Law as sections 6902-6909 and adds a new section 6901 to provide a new definition of the practice of reg-

Definition of
Nursing

istered professional nursing to include "diagnosing and treating human responses to actual or potential health problems," but such diagnostic privilege is made distinct from a medical diagnosis and such treatment is restricted to the nursing regimen or a prescribed medical regimen. The definition of the practice of licensed practical nursing is amended to include performing case-finding, health teaching, health counseling, and providing supportive and restorative care under the direction of a registered professional nurse or licensed physician or dentist. This chapter provides that nothing in the nursing article is to be construed as conferring the authority to practice medicine or dentistry.

CHAPTER 57 amends subdivision 2 of section 6906 of the Education Law to provide that, if a candidate for a license in nursing is awaiting the result of a licensing examination at the time his limited permit expires, the candidate's permit will continue to be valid until 10 days after the Education Department notifies the candidate of his examination results.

Limited
Permits in
Nursing

CHAPTER 110 amends subdivision 5 of section 6906 of the Education Law to extend from 30 to 90 days the time during which a graduate nurse may practice under supervision pending receipt of a temporary permit.

Limited
Permits in
Nursing

CHAPTER 181 amends subdivision 1 of section 6527 of the Education Law to authorize not-for-profit medical or dental expense indemnity corporations or hospital service corporations to enter into contracts for medical services with professional service corporations organized under Article 15 of the Business Corporation Law and nonprofit medical corporations organized under Article 44 of the Public Health Law. This chapter also amends subdivision 4 of section 6527 to

Medical
Corporations
and
Professional
Service
Corporations

exempt such nonprofit medical corporations and professional service corporations from the prohibition against the practice of medicine.

CHAPTER 195 amends subdivision 2 of section 7206-a of the Education Law to provide that each full year of college study may be accepted as the equivalent of a full year of experience, up to a maximum of 2 years, for applicants for admission to the licensing examination in land surveying.

Admission to
Examination
in Land
Surveying

CHAPTER 197 amends subdivision (2) of section 7804 of the Education Law to delete the requirement, which would have become effective on January 1, 1973, that an applicant for a massage license must have 800 hours of classroom instruction, and repeals subdivision (3) of section 7804, which would have become effective on January 1, 1975, and would have required 400 hours of hospital experience by an applicant for a massage license.

Licensing
Requirements
for Masseurs
and
Masseuses

CHAPTER 244 amends section 2305 of the Public Health Law to authorize a staff physician of a hospital to diagnose and treat a person who is infected with a venereal disease or who has been exposed to infection, including a person under the age of 21 years who has not obtained the consent of his parents or guardian.

Treatment of
Venereal
Disease

CHAPTER 289 amends section 7004 of the Education Law to require each licensed podiatrist, at the time of application for biennial registration, to present satisfactory evidence to the State Board for Podiatry that in the years prior to filing for re-registration, he attended education programs conducted by the Podiatry Society of the State of New York or an equivalent program.

Podiatrists—
Registration

CHAPTER 330 amends section 6536 of the

Physical

Education Law to provide exemptions from the licensing requirement for physical therapists, for students working in approved programs of instruction or instructors teaching in such programs who are licensed in another state or country, and for persons employed as physical therapists on active duty in the armed forces, or employed by the Public Health Service of the United States or the Veterans Administration.

Therapy
Exemptions

CHAPTER 472 amends section 6531 of the Education Law to provide that physical therapists may provide treatment pursuant to the prescription or referral by a physician in accordance with the physician's diagnosis, and eliminates the former requirement that such treatment must be under the supervision or oral prescription of a physician.

Physical
Therapists—
Providing
Treatment

CHAPTER 501 amends subdivision 3 of section 6527 of the Education Law to extend to podiatrists the same protection against liability presently afforded physicians and dentists serving on hospital review committees or committees of state or local societies evaluating health facilities or the quality of health care or investigating a dispute involving professional care or fees.

Podiatrists—
Legal
Immunity

CHAPTER 682 amends section 7005 of the Education Law to authorize a graduate of an approved podiatry school, who is eligible for examination, to participate in a clerkship for 2 years under the direct supervision of a licensed podiatrist, who is a faculty member of an approved school, for the purposes of a preceptorship program.

Practice of
Podiatry

CHAPTER 768 adds a new section 399-m to the General Business Law to require promoters of paid public functions, where it is believed that the attendance will number 10,000 or more people, to secure the attendance of a licensed

Physician's
Attendance at
Paid Public
Functions

physician to render emergency medical treatment if necessary.

CHAPTER 769 amends the Public Health Law by adding a new section 2504 to dispense with the necessity for parental consent to medical treatment of a minor in an emergency. Any individual over 18 or married, or a parent, may give consent for medical treatment for himself or his child.

Consent to
Medical
Treatment

CHAPTER 881 (effective April 1, 1973) conforms various references and provisions in sections 811, 6802, 6807, 6808, 6810, 6815, and 6817 of the Education Law to the provisions of the Controlled Substances Act (chapters 878, 879, and 880) which enact legislation controlling the possession, manufacture, dispensing, administering, and distribution of drugs which have been defined as controlled substances by article 33 of the Public Health Law.

Controlled
Substances

CHAPTER 884 amends several sections of the Public Health Law dealing with the qualifications and certification of a nurse-midwife, formerly designated by the title of mid-wife.

Nurse-
Midwife

CHAPTER 918 (effective April 1, 1973) amends several sections of the Public Health Law to provide for the approval and regulation of "home health agencies," which include public or nonprofit organizations primarily engaged in providing professional nursing services and related services to persons at home.

Home Health
Agencies

CHAPTER 922 amends section 7306 of the Education Law to provide that the definition of the practice of architecture does not prevent contractors or builders from engaging in construction management and the administration of construction contracts.

Architecture-
Exempt
Persons

CHAPTER 923 amends section 7301 of the

Definition of

Education Law, which defines the practices of architecture. This chapter makes no substantive change in the scope of the profession but eliminates some ambiguities which were present in the prior definition.

CHAPTER 927 amends the Public Health Law by adding a new section 2805-b to provide that every private proprietary nursing home having a capacity of 80 patients or more may have a licensed medical doctor in attendance, upon the premises, for the care and treatment of patients.

CHAPTER 954 amends section 7208 of the Education Law to provide that the definition of the practice of engineering does not prevent contractors or builders from engaging in construction management and the administration of construction contracts.

Architecture

Physicians
In Attendance
at Nursing
Homes

Engineering—
Exempt
Persons

Appendix P

Resolutions of the Association of Colleges and Universities of the State of New York In Support of the Master Plan of the Commission on Independent Colleges and Universities

Whereas the State of New York has since 1961 provided scholar incentive grants to qualified students for attendance at colleges and universities of their choice, public and private, and whereas the costs of college attendance have steadily risen in the decade since the program's inception, and whereas, the public and private higher education institutions of the State are agreed that the current economics of college and university operation inhibit further unfunded institutional student aid,

Be it resolved that the Association of Colleges and Universities hereby petitions the Governor and the Legislature to review the present scholar incentive program stipends with the purpose of increasing these grants to enhance freedom of choice for students of New York State.

Adopted unanimously
26 September 1972

ASSOCIATION OF COLLEGES AND UNIVERSITIES OF THE STATE OF NEW YORK

Whereas the flow of associate degree recipients from public community colleges and private junior colleges continues to accelerate, and whereas many of these graduates qualified to continue their studies for the bachelor's degree in arts and science are unable to do so

for lack of support or opportunity, and
 whereas admissions by transfer to upper division programs in four-year colleges and universities are available in private institutions for those students qualified to attend

Be it resolved, that the Association of Colleges and Universities advocates the establishment of a state funded program of transfer vouchers to enable these associate degree graduates to continue their education at the institution of their choice in New York State, with full credit for work already satisfactorily completed, such funding to be at a level approximating that provided for studies in the public institutions of the State.

Adopted unanimously
 26 September 1972

ASSOCIATION OF COLLEGES AND UNIVERSITIES OF THE STATE OF NEW YORK

Whereas the budgetary requirements of public colleges and universities indicate a compelling need to provide adequate support for their operational and capital needs, and
 whereas the program of state aid for non-public colleges and universities enacted by the Legislature in 1968 has become a major asset for the preservation of private institutions, and
 whereas the provision of full educational opportunity for New York's citizens must make full use of its total higher education resources

Be it resolved that the Association of Colleges and Universities of the State of New York pledge its commitment to further the collaborative interests of both public and private colleges and universities through cooperative regional programs, interinstitutional activities and coordinated state-wide planning, and

Be it further resolved that the Association of Colleges and Universities of the State of New York support the request made by the Commissioner of Education for funding of the programs of regional planning councils, and

Be it further resolved that the Association of Colleges and Universi-

ties join in common effort to obtain the funding necessary for the operation of the public universities, and

Be it further resolved that the Association of Colleges and Universities of the State of New York reaffirm its endorsement of the principle of direct state support for non-public institutions of higher education, and urges an increase in funding for the program, leaving to the Association's Executive Committee and the State Education Department the early development of an implementing proposal.

Adopted by majority vote, one dissent
26 September 1972

ASSOCIATION OF COLLEGES AND UNIVERSITIES OF THE STATE OF NEW YORK

Whereas the Einstein-Schweltzer Regents University Professorships created by the Legislature in 1964 have attracted to New York's public and private universities ten distinguished scholars of international reputation, and
whereas the research and teaching programs made possible by their leadership have had major influence in their several disciplines for the direct benefit of the people of New York, and
whereas these distinguished University Professors have attracted to New York other great teacher-scholars, outstanding students, and federal and foundation support of a magnitude far greater than the State's investment in the chairs themselves,

Be it resolved that the Association of Colleges and Universities strongly urges that these ten professorships be restored to full funding annually of \$100,000 each in the 1973-74 fiscal year.

Adopted by majority vote, one dissent
26 September 1972

ASSOCIATION OF COLLEGES AND UNIVERSITIES OF THE STATE OF NEW YORK

Whereas the Legislature in its wisdom in 1965 established "Herbert H. Lehman graduate fellowships in the social sciences and public and international affairs for the purpose of attracting the

highest quality students in the nation to graduate study in the State of New York . . ." and

whereas ninety fellowships were awarded annually beginning in 1967 entitling the holder to an annual grant of \$5000 for each of four years, until the program was denied budgetary support for 1971-72, and

whereas the preparation of high quality young minds to assure leadership in government, foreign commerce and public affairs continues to be an essential responsibility of society,

Be it resolved that the Association of Colleges and Universities recommends to the 1973 Legislature that the Lehman fellowships program be budgeted for 1973-74 to provide again for the ninety fellowship holders annually which the Legislature originally established.

Adopted by majority vote, one dissent
26 September 1972

ASSOCIATION OF COLLEGES AND UNIVERSITIES OF THE STATE OF NEW YORK

This past January a gentleman of our acquaintance quietly slipped into a well earned retirement in an uncharacteristically taciturn manner. For about fifteen years he was at the center of most activities in New York State that had anything to do with higher and professional education. His scholarship, good humor, and administrative competence, all of a high degree, contributed mightily to every college and university in New York. Even though his innate modesty would preclude any ceremony on this occasion, we of the Association of Colleges and Universities of the State of New York cannot leave unrecognized such devotion to service. We extend to Frank R. Kille, Associate Commissioner for Higher and Professional Education in the State Education Department, our sincere wishes for happiness, good health and longevity in his new life of leisure.

Adopted unanimously by standing voice vote
26 September 1972

Appendix Q

Glossary

- Agricultural and Technical Colleges*—Public 2-year colleges of the State University of New York which are completely State supported and whose programs are mainly, though not exclusively, of the career type rather than the transfer type.
- Categorical Aid*—A type of financial aid that is granted in terms of specific categories as contrasted with general aid. An example of categorical aid would be programs for medical education. The "Bundy Aid" is not categorical, being available to the institutions to use as they deem best within the bounds of prudence.
- College Cooperative Centers*—Educational facilities designed to provide academic remediation, tutoring, and counseling to prepare students for entry into 2- or 4-year colleges. These are completely State supported and are administered by the State University of New York.
- College Opportunity Programs*—Programs to provide tutorial and counseling services plus financial assistance to eligible students in higher education institutions in the State of New York.
- College Proficiency Examinations*—Single-subject tests developed by college faculty designed to measure college level knowledge in specific subject matter areas, however that knowledge has been obtained. Grading standards are determined by norming the examinations of appropriate end-of-course regularly enrolled college students.
- Collegiate Post-Secondary Education*—All forms of post-secondary education carried on under the supervision and/or administration of a degree-granting institution incorporated by the Regents.
- Community Colleges*—Public 2-year colleges established and operated pursuant to Article 126 of the Education Law. These are locally sponsored under the program of the State University of New York. In New York City, with the exception of Fashion Institute of Technology, the local sponsor is the Board of Higher Education of the City of New York.
- Competency-Based, Field-Centered System of Teacher Preparation*—A system in which (1) the competencies to be demonstrated

and the criteria for assessment are made explicit and public, (2) the trainee is held accountable for meeting the criteria, (3) appropriate preparatory experiences are carried on within the school setting, and (4) preparatory programs are held accountable for preparing able personnel.

Course of Action—A description of the state of affairs as it presently exists, and an indication of the direction and speed with which the objectives are to be achieved.

Doctoral Degree Programs: Academic and Research—Those programs designed to contribute to the knowledge of the subject matter, emphasize theory, and utilize sophisticated research methods.

Doctoral Degree Programs: Professional—Those programs designed to prepare a person for the practice of a profession. Examples are the doctor of medicine, dentistry, and law programs.

EOP (Educational Opportunity Program)—The name given to the College Opportunity Program administered by the State University of New York.

Engineering Development Program—A post-baccalaureate continuing education program designed for technological updating of employed engineers. Intended to minimize job disruption and to deemphasize degree orientation, the program would employ a multimedia instructional package approach. Each of several learning modules necessary for gaining competence in a specific subject area would be prepared by joint academic-industrial committees.

Enrollment: Full-Time Equivalent—The number of full-time students enrolled plus the number of part-time students equated to full-time students. The methods of equating part-time to full-time vary. One method, used as a rule of thumb, is to divide the part-time figure by three.

Enrollment: Level of Attendance—

Undergraduate: The number of students enrolled in programs leading to a bachelor's degree or associate degree.

1) Lower Division: the first 2 years of an undergraduate program.

2) Upper Division: that portion of an undergraduate program following the first 2 years.

First-Professional: The number of persons enrolled in programs leading to the following degrees:

Dentistry—D.D.S. or D.M.D.

Law—LL.B. or J.D.

Medicine—M.D.

Veterinary Medicine—D.V.M.

Chiropody or Podiatry—D.S.C. or D.P.

Optometry—O.D.

Osteopathy—D.O.

Graduate: The number of students enrolled in programs leading to the master's or doctoral degree.

Enrollment: Type of Attendance—

Full-Time: The number of students enrolled in a given term in courses that are equal in credit to at least 75 percent of a normal full-time load.

Part-Time: The number of students enrolled in a given term in courses that are equal to less than 75 percent of a normal full-time load.

Full Opportunity Program—The program of the State University of New York which guarantees admission to the university system to every high school graduate in New York. This program is not fully operational, but steps are being taken to complete its implementation.

Goal—A description of some highly desirable condition which is sought, stated in broad, qualitative terms, which may be either fully or partially attainable during the life of the plan and, at any given time, may have to be limited or deferred.

HEOP (Higher Education Opportunity Program)—This is the name of College Opportunity Programs in the private sector of higher education in the State of New York.

Master's Degree: Academic—Those master's programs that are designed to contribute to the knowledge of the subject matter and to emphasize theory, as contrasted with professional master's degree programs.

Master's Degree: Professional Programs—Those programs designed to prepare a person for professional practice, and which are generally, but not exclusively, terminal in nature.

Net Assignable Square Feet (NASF)—The sum of all areas on all floors of an institution's buildings assigned to or available for assignment to an occupant, including every type of space functionally usable by an occupant, except custodial, circulation, and mechanical areas.

Noncollegiate Post-Secondary Education—All forms of post-secondary education conducted by institutions and/or agencies other than traditional collegiate degree-granting institutions. Examples are programs offered by proprietary schools, business and industrial centers, libraries, and museums.

Nursing: RN and LPN—Among the health professions classified as "nursing," two require licensure to practice: (1) Registered Professional Nurse (RN) where preparation has been in a 4-year baccalaureate program, a 3-year diploma program, or a 2-year associate degree program, and (2) Licensed Practical Nurse where preparation has been in a 1-year program.

Objective—A statement of a specific end to be achieved in each functional area for which a goal has been developed, the achievement of which must occur within a specific time span.

Open Admissions Program—A program at The City University of New York whereby every graduate of a New York City high school is guaranteed admission to The City University system.

Physician's Associate—A highly skilled health professional who is registered as a physician's associate pursuant to section 6531 of the Education Law, and who, under the supervision of a licensed physician, is capable of taking a complete medical history, performing a physical examination and other routine diagnostic and therapeutic procedures which his supervising physician may delegate to him in accordance with his training and capabilities.

Post-Secondary Education—All forms of education beyond the high school, both of a collegiate and noncollegiate nature, including, but not limited to, programs offered at traditional colleges and universities, proprietary schools, industrial centers, apprenticeship programs, and other educational facilities such as libraries, museums, and cultural centers.

Proprietary Schools—Private occupational, business, and correspondence schools licensed or registered by the State Education Department to operate in New York. The term "proprietary" refers to their profit-making status.

Regents External Degree—A college-level degree awarded by the Regents upon evaluation of a person's record which may consist of results of college proficiency examinations, accumulation of college credits gained by regular college attendance, independent study, or other means deemed to be pertinent. The ob-

jective is to give credit for the knowledge a person has acquired rather than for where he acquired it.

Regents Scholarships—A competitive scholarship program financed by the State of New York and available to residents enrolled at institutions of higher education, both public and private, in New York. (Details on the categories in which scholarships are awarded are available from the State Education Department.)

Regionalism—The utilization of the resources, both physical and personal, of public and private institutions of higher education on a regional basis in the development of programs to meet the individual and societal needs of the State.

Rules of the Board of Regents and Regulations of the Commissioner of Education—The measures adopted by the Regents to interpret and implement the statutes pertaining to the development, direction, and coordination of the educational system of the State. When filed with the secretary of state, they have the effect of law.

Scholar Incentive Awards—A noncompetitive financial assistance award, administered by the State Education Department, available to residents of the State of New York who are enrolled in institutions of higher education, both public and private, in New York. The amount of the award is based on family income. Diploma schools of nursing students are eligible also.

SEEK (Search for Education, Elevation and Knowledge)—The program through which the College Opportunity Program is administered at The City University of New York.

Urban Centers—Educational facilities that emphasize vocationally oriented education and training with employment or job upgrading as the main goal. The facilities are completely State supported, and are administered by the 2-year colleges of the State University of New York.

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