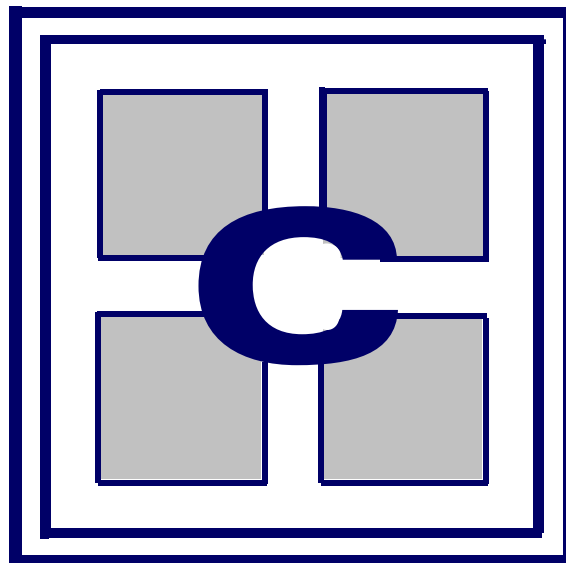


**THE CALIFORNIA MASTER PLAN
FOR
HIGHER EDUCATION
IN THE SEVENTIES AND BEYOND**



REPORT AND RECOMMENDATIONS
OF THE
SELECT COMMITTEE ON THE MASTER PLAN
FOR HIGHER EDUCATION
TO THE
COORDINATING COUNCIL FOR HIGHER EDUCATION

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MASTER PLAN FOR HIGHER EDUCATION

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INTRODUCTION

With this report, the Select Committee completes an intensive review and assessment of the twelve-year history of California's Master Plan for Higher Education. In 1960 the State of California established a "Master Plan for the development, expansion and integration of the facilities, curriculum and standards of higher education, in junior colleges, State colleges, the University of California, and other institutions of higher education of the State, to meet the needs of the State during the next ten years and thereafter." In summary, the conditions that prompted the emergence of the Master Plan were:

- * Large increases in enrollments during the fifties and even larger enrollments projected for the sixties;
- * Almost uncontrolled aspirations and proposals of local communities for local public campuses;
- * Fear by each segment of higher education of having unbridled competition minimize its potential and role;
- * A plethora of proposals to reorganize the structure of the State's systems of higher education; and
- * A desire in the State Legislature to remove many of the educational questions from the political arena and

* to provide a system for orderly growth for the sixties
and early seventies.

A Master Plan for Higher Education in California, 1960-1975,
responded to a legislative resolution. The Plan consisted of 67 separate recommendations that provided a basic structure of three public systems, or segments, of higher education--the University of California, the California State Colleges, and the California Junior Colleges--each with shared and differentiated functions. The document also recommended the creation of a Coordinating Council for Higher Education as an advisory agency responsible for providing the educational systems and State government with advice on the planning of orderly growth, on differentiation of function and on the level of financial support for the systems, In addition to this basic structure, which was incorporated into the Donahoe Higher Education Act by a special session of the Legislature in 1960, the Master Plan included a number of agreements adopted by the Regents of the University of California, and the State Board of Education, which at that time administered the Junior and State Colleges. (One of the Master Plan recommendations proposed the creation of a separate Board of Trustees for the California State Colleges, which the Donahoe Act subsequently provided.)

Since the 1960 Master Plan was promulgated, there have been a few minor changes, including:

* Establishment of a Board of Governors as the governing
authority for the California Community Colleges;

- * Modification of the percentage of total first-time students to be admitted as exceptions to the Master Plan agreement from 2 percent to 4 percent, with the provision that the additional 2 percent should be for ethnic minority students;
- * Rescission of the provision advising the segments to report their grading standards to the Coordinating Council for Higher Education;
- * Adoption of an Educational Fee by the University of California; and
- * Approval of a graduate program in architecture for a State College.

All modifications were recommended by the Coordinating Council and superseded the original provisions.

The Master Plan was first reviewed in its entirety by the Coordinating Council in 1965-66, primarily to determine progress toward implementation of the original 67 recommendations. The study reported substantial progress in implementation by all responsible groups, but suggested that three Master Plan recommendations should be clarified, five others should be studied because of difficulties in implementing them, and one concerning the reporting of grading standards not to be implemented at all.

A little more than a year after the 1965-66 Master Plan review, the Coordinating Council considered a notion for a study of the relationship

of the segments to the Master Plan. The Council's discussion pointed out that a number of "factors and forces" with impacts on higher education were not completely foreseen in 1959 and 1960. One such factor was the increasing participation of the federal government in the financing of higher education; another was the increased strength of the State Colleges; a third was the reexamination of the traditional functions of the faculty in governance of higher education, particularly in the State Colleges where faculty organizations were competing with faculty senates for status and power. Other "new" factors mentioned were the increasing demands from students to participate in shaping policies that affected them, failure of financial support to keep pace with rising enrollments and costs, and the widespread concern for disadvantaged young people.

The Legislature, it was also noted, had similar concerns about these new forces in higher education and had established a Joint Committee on Higher Education to examine them. The suggestion was made that a new or revised Master Plan might be developed in cooperation with the Joint Committee, and a comprehensive outline of topics to be studied was proposed, including, as a primary concern, a review of the concept of delineation of functions. The minutes of the Council's December 1967 meeting indicated that the review of the Master Plan proposed earlier that year would take the form of subject and topic studies rather than a review of the primary concepts and philosophy on which the Master Plan was based.

For the following two years (1968-70) the Coordinating Council carried out topical studies as a base for the overall reexamination of the Master Plan. In January 1971, the Council began that overview

with a resolution proposing a "broadly representative select Master Plan committee" to carry out the task. The Council resolution stated that "the Master Plan had had a positive and creative impact on California's higher education and has been beneficial to the State and a model to the nation, but has not been updated in ten years"

The resolution further declared that "changing social attitudes and conditions call into question some of our present approaches to higher education and stated the Council's belief that "the Master Plan must be reconsidered and updated in the light of new circumstances and developments and the needs of the 1970's . . ." Just prior to this action, the Legislature had appointed a Joint Committee on the Master Plan for Higher Education to succeed its earlier study group.

In March 1971 a plan for this restudy of the Master Plan was presented to the Council, with suggestions for appointing a select committee consisting primarily of lay public members. The study plan emphasized an examination of the assumptions, philosophical bases, and recommendations of the Master Plan in light of the new circumstances, developments, and needs of the 1970's. According to the proposal, the objective should be to provide advice to State government on the necessity and form of a new blueprint for California higher education.

In May and July of 1971 the Coordinating Council announced the appointment of a seventeen-member Select Committee on the Master Plan for Higher Education. The Select Committee first met on June 29, 1971, to receive its charge. The Committee has now completed its study of more than a year.

The Select Committee's charge required a review of the nature and application of the 1960 Master Plan and of the conditions forecast for

the 1970's in order to advise the Coordinating Council whether the current Master Plan should be maintained intact, revised, or replaced. It also required review of the present strengths and weaknesses of higher education in California.

Any assessment of strengths and weaknesses of higher education presupposes agreement on the goals of public higher education. Accordingly, the Select Committee spent considerable time discussing and listing the goals of higher learning and seeking agreement on their relative importance. A summary of these goals follows this section.

To make the fullest use of the 14 months available to it for the review, the Select Committee, in addition to monthly public meetings of the full Committee, appointed three major subcommittees, which met frequently. The first of these considered the benefits and the costs of higher education to the State of California; the second considered the higher education system from the student's viewpoint and compared the available educational opportunities with student needs, aspirations, and interests; and the third explored the probable impact of newer trends, including new methods of instruction, and of more recently emerging demands on the educational system. The Committee also made use of two other subcommittees for shorter periods of time; one to list and rank the goals of higher education, the other to consider possible changes in the structure, governance, and coordination of the State's systems of higher education. All meetings of the Select Committee were announced in advance and were open to the public. Minutes of these meetings and the reports of the subcommittees are on file with the Coordinating Council.

The Select Committee relied heavily on the research reports of the Coordinating Council for Higher Education and on other previous studies sponsored by a variety of institutional and governmental groups and agencies. The Committee's task was made manageable and much more productive by the constant and willing assistance of the administrations and staffs of the Coordinating Council for Higher Education, the California Community Colleges, the California State University and Colleges, the University of California, the State Department of Finance, and the State Scholarship and Loan Commission. The Legislative Analyst and his staff, representatives from the faculty Academic Senates and Councils and student organizations, personnel from a number of campuses in all segments, and the Executive Director and presidents of member institutions of the Association of Independent California Colleges and Universities have all been cooperative and helpful to the Committee.

The Select Committee also has been greatly assisted by the work of the Legislature's Joint Committee on the Master Plan and its staff. Members of the Select Committee have participated in workshops of the Joint Committee; all information developed by the Joint Committee has been made available to the Select Committee, and vice versa; and cooperation between the staffs of the two Committees has been excellent. The result has been to make available to the Select Committee several times the amount of information it could have secured on its own, and this substantial help, like that described above, is acknowledged with gratitude.

The report that follows attempts to provide brief rationales underlying specific Select Committee recommendations. A conscious and deliberate effort was made to refine the report to its irreducible

minimum and to present the recommendations as advice for broad policy direction that are more significantly related to philosophical and public-policy assumptions and goals than to quantitative data.

The report should not be viewed, then, as the full or final documentation of the recommendations. The files and library of the Coordinating Council for Higher Education contain most of the data and reports upon which the report was based. Consequently, although this report contains recommendations for a revision of some Master Plan policies, the Select Committee was not charged to produce a new Master Plan document, and has not done so. The Select Committee believes that such responsibility rests with the Coordinating Council for Higher Education, and the Legislature after reviewing the various recommendations in this report. The advice offered by the Select Committee will be further analyzed by the Council and the Legislature, which may also wish to add to any revised Master Plan other provisions not contained in this report.

Since the Select Committee believed the focus of its charge was directed toward the Master Plan structure, the first chapter of the report describes its views and advice on this subject. The second chapter contains recommendations concerning "admissions and other aspects of educational policy." Since most Select Committee members reached an early tentative view that the California educational structure has more advantages commending its retention than disadvantages mandating major overhaul, attention was directed to the substance of educational policy in order to suggest positive approaches for improvement regardless of structure. In the next chapter, the report turns to financial questions and recommendations growing out of the conditions of the seventies as viewed by the Select Committee.

Following the narrative and recommendations, there appears a statement of the assumptions upon which the recommendations are primarily based.

Throughout the report we have attempted to emphasize the need for developing a reliable structure and process for change and planning that will enable the State's system of higher education to respond to a dynamic society. We have also maintained a conscious effort to probe into methods of strengthening higher education and the public's confidence in higher education. While we have examined, studied, and discussed national trends in structural changes we have been reluctant to support unproven theories as substitutes for proven performance. The Committee has not been reluctant, however, to state its findings of positive merit in the current structure and its conviction that California's system of higher education has served the State well. But neither have we concluded that improvements are unnecessary.

We know that the Coordinating Council for Higher Education will consider carefully our evaluations and recommendations, and we hope that the general public will also have an opportunity to review our work. If this report assists California in reaffirming its historic commitment to excellence in its higher education system and in sustaining that commitment by continuing improvement this Committee will have earned its name.

GOALS OF CALIFORNIA HIGHER EDUCATION

A statement of general goals for California higher education is fundamental in the planning and implementation of programs for both individual institutions and for systems of higher education. The following statement sets forth the broad goals that the Select Committee believes inspire the public to maintain at public expense an extensive system of higher education. It does not include means of accomplishing these goals, nor does it include specific planning objectives.

* * * * *

California's goal in providing and maintaining public higher education is to encourage the development of well-educated citizenry as the best guarantee for a free and healthy society, one that is capable of intelligent adjustment to changing life conditions and that strives for improvement in the quality of life.

This broad goal includes a public commitment to develop human resources as the State's greatest asset, to encourage the intellectual and personal development of each citizen over his lifetime to the fullest extent of his ability and application. This goal requires preparing the individual for productive participation in society by the development of abilities, attitudes, and skills in the application of self and knowledge for the constructive operation and improvement of society.

More specific goals of public higher education are to provide to all of the State's citizens the widest opportunity and diversity of higher education and an unexcelled quality of instruction, research, and public service by which graduates and other participants may develop and acquire abilities and experiences in independent thought, critical analysis, and decision making that are beneficial to the whole of society and to the individual.

* * * * *

Although there are many means by which these goals may be achieved, the Select Committee supports the following principles in the implementation of goals.

The Select Committee supports in principle universal access to higher education. Further, the Select Committee advocates broad opportunities for learning beyond high school through alternatives to the present formal institutions of higher learning. Equality of access and a diversity of higher education opportunities should be assured to citizens of all socio-economic levels by appropriate policies and programs that provide financial and other necessary assistance.

Public higher education should be responsive and responsible to the people of the State in providing, within the means of the State and the individual, access and free choice of fields of study, by which educational foundations for careers may be established, including technical and vocational fields and the traditional liberal arts, sciences, humanities, and the professions.

The differentiation of function by educational systems should be enhanced by institutional efforts to achieve excellence within their assigned functions and by sufficient flexibility and diversity to accomplish the general goals of higher education. Maximum cooperation and coordination of the public segments in partnership with the non-public institutions should be achieved in order to improve the opportunities available, the quality of programs, and the cost effectiveness of public funds.

CHAPTER I

STRUCTURE , GOVERNANCE, COORDINATION, AND PLANNING

The primary charge of the Select Committee was to examine the Master Plan of 1960 and to review it "in the light of new circumstances and developments and needs of the 1970's." In carrying out this charge, an attempt was made to define the Master Plan, its provisions, and its assumptions. This examination led to the conclusion that the Master Plan consists of structure, principles, and processes by which educational policy and programs are determined as much as it consists of educational policies alone.

The Select Committee attempted to examine the "state of higher education" in California, to assess its strengths and weaknesses and their causes. Particularly, the structure was evaluated to determine to what extent any strengths and deficiencies are attributable to structure. It was agreed that only significant and major deficiencies would justify recommending a major change in structure with all the accompanying dislocations and expense.

Structure

The structure provided by the 1960 Master Plan is basically a simple one, consisting of three large organizational systems, or segments, of public higher education with many campuses as component units; each segment with a different legal basis of organization

and operation; and each with differentiated functions beyond lower division instruction.¹ These public segments are complemented in the Master Plan structure by many nonpublic institutions, with which liaison is effected by a representative on the coordinating body. In order to provide coordination and planning for the State as a whole, the Master Plan provides for an advisory State body consisting of representatives of the segments of higher education and the general public, supported by a professional staff. This group is charged with advising the segments and State government on the entire range of policy areas concerning higher education. The Donahoe Higher Education Act of 1960 provides the legal structural framework of the Master Plan.

The Select Committee examined the structural aspects of the Master Plan in light of the conditions of the 1970's and found them basically sound. Before reaching this conclusion, new structural approaches, as well as various modifications of the present organization, were studied in the context of past performance, present conditions, and future needs.

As did the 1959 Master Plan Survey Team, the Select Committee examined the various possibilities for restructuring public higher education and reviewed the concept of a single governing board for all of public higher education, or a superboard over existing boards. Also reviewed was the proposal to merge the two senior segments into one system, as was recommended to the Coordinating Council by the

1. These segments are: the California Community Colleges, with more than 96 campuses; the California State University and Colleges, with 19 campuses; and the University of California, with 9 campuses.

Academy for Educational Development in 1968, and the 1969 staff report of the Legislature's Joint Committee on Higher Education, which proposed reorganization of the State's public colleges and universities into several regional systems. The Select Committee has concluded that:

- 1. The basic structure for California higher education as provided in the 1960 Master Plan has served California well and should be retained.*

Perhaps the single most important accomplishment of the 1960 Master Plan was the formalization of the concept of delineation of functions and of the educational roles assigned to the University of California, the California State University and Colleges, and the California Community Colleges, respectively. The Select Committee believes that the preservation of this concept is essential to the health and well-being of California's public institutions, the maintenance of educational quality, and the stimulation of educational diversity. The continuation of separate governing boards will encourage each segment to maintain and improve its own ability to carry out its assigned educational role, including such research and public service as are appropriate to it. Under this structure the University, the State University and Colleges, and the Community Colleges have become the very best of their respective kinds of educational institutions in the world today.

The Master Plan Survey Team recommended incorporation of the basic structure, including delineated missions for each segment, in

the State Constitution, rather than State statute. In its August 1970 report, the Constitution Revision Commission concurred.

The Select Committee has also discussed and reviewed some of the implications of constitutional status for the California State University and Colleges, the California Community Colleges, and the Coordinating Council for Higher Education similar to that now provided the University of California. Information was also considered from a national study that examined the differences between institutions or segments with constitutional status and those with statutory provisions. The recommendations that emerged from the Constitution Revision Commission study of Article IX also have been examined.

The Select Committee was unable to reach sufficient agreement for a well-reasoned recommendation supporting or not supporting the inclusion of other segments and agencies in the Constitution. The Committee did agree, however, that it is desirable as a matter of public policy that all public segments should be regarded as equal partners in carrying out the public will and that there be equality and parity in the relationship of State government to each segment of California higher education.

Membership and Terms of Governing Boards

The Select Committee has reviewed the role of *ex officio* members of the University of California Board of Regents and the California State University and Colleges Board of Trustees. The Committee considered extensively the relative advantages and disadvantages of *ex officio* membership and decided not to make recommendations for change. It was agreed, however, that the governing boards and the

Coordinating Council for Higher Education should more nearly represent the broad spectrum of the California population than they have in the past and that faculty and students should have more meaningful responsibilities in the governing process.

The differences in the provisions concerning terms of office and *ex officio* membership of the governing boards of the senior segments need to be minimized, removed, or a more clear rationale stated for them. The Select Committee believes the terms should be long enough to encourage a depth of knowledge and expertise about the institution and to permit independence from partisan actions; yet short enough to make it possible for the frequent addition of new appointees. Although there may be sufficiently different functional differences among the three governing boards of the public segments to explain the differential in their terms of office, the Select Committee proposes the following:

2. *It is recommended that the terms of office for members of the governing boards of California public higher education should be set at twelve years, that no member be eligible for reappointment after serving a full term, and that retirement be mandatory at 70 years of age.*

Membership of the Coordinating Council

If the Coordinating Council for Higher Education is to serve effectively as an advisory agency on educational policy and planning, its membership, like that of the governing boards, must represent

the broad public. Because of the interrelationships between higher and secondary education it would seem appropriate to include on the Council a voting member from the State Board of Education. With a State and national concern for emphasizing technical and career education, there seems to be a need for including a representative of the California Advisory Council on Vocational Education and Technical Training in addition to the traditional segmental representatives, who also represent vocational and career education. A mounting interest in proprietary collegiate institutions, their growth, and their role among the State's postsecondary institutions dictates a consideration of membership for that sector.

Beyond these categorical memberships there is a need to emphasize the public majority. In order to support this emphasis and to make the Council's relationship to the governing boards of systems of public higher education a more direct one, the Select Committee considers it advisable to add governing board chairmen, or their alternates, to the Council, in addition to the chief executives of the systems.

In addition to responding positively to the consideration of broad, lay public representation, the recommendations that follow also coincide with the guidelines of the federal Higher Education Amendments of 1972 concerning a statewide comprehensive planning agency for postsecondary education:

3. *The Coordinating Council for Higher Education should be renamed the California Commission for Higher Education, to reflect an emphasis upon its expanded planning*

*function, and should be composed of 21 members,
including the following:*

- a. The Chairman of the Board of Regents of the University of California, or his alternate from among and with the approval of the Board of Regents, and the chief executive of the University.*
- b. The Chairman of the Board of Trustees of the California State University and Colleges, or his alternate from among and with the approval of the Board of Trustees, and the chief executive of the State University and Colleges.*
- c. The Chairman of the Board of Governors of the California Community Colleges, or his alternate from among and with the approval of the Board of Governors, and the chief executive of the Community Colleges.*
- d. A president of a nonpublic institution and an alternate, appointed by the Governor, with the consent of the Senate, from a list of nominees proposed by nonpublic institutions; for a term of six years.*
- e. The Chairman of the State Board of Education or his alternate from among and with the approval of other members of the Board.*

- f. The Chairman of the California Advisory Council on Vocational Education and Technical Training (or a comparable agency) or his alternate from among and with the approval of other members of the Council.*

- g. A member from a proprietary institution and an alternate, appointed by the Governor, with the consent of the Senate, from a list of nominees provided by proprietary institutions; for a term of six years.*

- h. Eleven members from the general public, appointed by the Governor with the consent of the Senate; for terms of six years.*

The Council and the Master Plan

California's Master Plan for Higher Education consists primarily of the Donahoe Higher Education Act of 1960 and policies adopted by the governing boards of the segments at the recommendation of the Master Plan Survey Team. Sorting out the various parts of the Survey Team's report, *A Master Plan for Higher Education in California, 1960-1975*, that constitute the Master Plan, is a challenging undertaking. Spokesmen from the segments, individual legislators, leading educators, and other citizens all have varying interpretations of the "Master Plan."

If one begins with the 67 recommendations of the Master Plan Survey Team's report, he must then compare the provisions of the Donahoe Act, the implementing actions of the respective governing boards and faculties, and subsequent resolutions of the Coordinating

Council for Higher Education to get an accurate view of the Master Plan. For example, the Legislature failed to approve some of the Survey Team's recommendations and added some provisions of its own. In addition, the Coordinating Council has stimulated minor changes in some of the original 67 proposals since their introduction in 1960.

In the main, the statutory basis of the Master Plan is the Donahoe Higher Education Act, which does not define policy concerning student charges nor access, nor does it specify the body that should initiate or determine policy about these two important matters or many other vital issues. The Survey Team's report recommended specific admission-eligibility pools and a policy on student charges to each governing board, but it did not state explicitly how these fundamental policy areas would be reviewed. The Coordinating Council for Higher Education has, as a matter of precedent, been the source of some revisions. It is assumed, by precedent and by the nature of a planned and coordinated system, that the Coordinating Council should periodically review these and other primary policy questions and advise the segments and the State of revisions that are warranted.

The purposes and functions of the Coordinating Council for Higher Education, as set forth in the 1960 Master Plan, are appropriate and should be continued and need only to become more effective. In view of careful and thorough annual budget review by other State agencies, however, it is suggested that the Council refrain from a duplicative annual budget review process. The method and effectiveness of the Council's practice of making recommendations on faculty salaries each year should also be evaluated.

The legislative provision that no new campuses for any of the segments will be authorized without prior consideration and approval by the Council should be continued. The Council's approval of new programs, and the periodic review of the need for existing programs, is reaffirmed and should also be continued. The coordinating agency should be more energetic as a catalyst to encourage the segments to develop constructive and coordinated admissions and articulation standards, tuition and fee charges, and new learning centers and consortia. The Council should be the State agency, so declared by legislative intent, to develop and periodically update information on college-educated manpower that affects or is affected by public higher education in California and that is directly relevant to statewide planning for higher education. In this connection, the Council's right to secure data from institutions of public higher education and all State agencies should be sustained.

The Coordinating Council would be well advised to emphasize the kind of planning that not only serves as a basis for rational decisions in the present but also safeguards the flexibility of choice for future policies. Planning should not become a control mechanism called upon to defend or advance particular policies and practices in a partisan manner. Beneficial planning by the Council is most likely when the above considerations are applied and when the higher education community and State government are viewed equally as clients and the relationships are clearly horizontal.

The effectiveness of the Coordinating Council for Higher Education depends primarily upon its professional staff; the degree to which the public Council members become understanding and educated concerning

needs and issues of higher education and, similarly, the degree to which representatives of segments are statesmen in responding to the State's needs as a whole; and the degree to which the agencies of State government clarify and support the statutory role of the Council. While structure and statutory powers are not unimportant, much of the foregoing depends upon human factors of leadership and professional expertise--an essential to the Council, its Director, and staff. In order to focus on the need, the Select Committee recommends that:

4. *The Coordinating Council for Higher Education should be adequately financed and its professional staff should be either exempt from Civil Service or appropriately salaried to be competitively compensated so that these positions will attract professionals of the highest competence in administration and in educational policy and planning.*

5. *The Coordinating Council for Higher Education should consider the improvement of intersegmental liaison by the assignment, by each segment, of a dean's level position to the staff of the Coordinating Council to be carried by the respective segment's budget and approved by the Director of the Council. In addition to serving a liaison function, such personnel would serve as Scholars-in-Residence for the Council, responsible for project assignments planned in advance by the Director of the Council and the chief executive of the segment.*

The Coordinating Council should be the agency responsible for regularly assessing specific public policies and procedures for planning in higher education in California, including the following but not excluding other statewide higher education planning topics: admissions, articulation, facilities and program needs, enrollment and manpower projections, and student charges and financial aid programs. Many of these are suggested in other contexts in this report. In order to assist in this function and to carry out a larger responsibility for developing annually an ongoing State Plan for higher education, the Council should organize a planning section within its staff.

As a fundamental part of the planning function, the Coordinating Council should be the State's agency for planning information and data for higher education. After consultation with the segments and appropriate State agencies concerning definition and description of the necessary data, the Council should, with increased funding, undertake to prepare annually a *Statistical and Information Handbook on California Higher Education*, that would include, among other items, the variety of degree programs offered and current data about the three public segments.

Understanding the Master Plan to be a process as much as policy, the Select Committee suggests that the Master Plan should be more clear concerning the process of ongoing and periodic revision and modification. In the Committee's judgment, the 1960 Master Plan intended the Coordinating Council for Higher Education to be responsible for such revision and review, and this should be clearly stated

in any revised Master Plan. It is suggested that this role be reaffirmed.

6. *The Master Plan and the Donahue Higher Education Act should be amended to state:*

- a. *The Coordinating Council for Higher Education is the official State agency for the regular and periodic review, interpretation, application, modification, and declaration of the State's Master Plan for Higher Education, and shall make such recommendations to the Legislature for statutory changes it deems necessary and appropriate to carrying out its functions.*
- b. *The Coordinating Council for Higher Education shall have the authority to develop criteria that shall be used by the segments in the planning of new programs or in the continuing support of ongoing programs where substantial expense or critical cost/benefit ratios are involved.*
- c. *The Coordinating Council for Higher Education shall have authority to review and advise with respect to the need for ongoing programs and shall review and express its approval or disapproval of new programs, including external and extended degree programs, and excluding core and experimental programs mutually agreed upon*

by the Council and the respective segments. (It is intended that the segments shall seek the advice of the Council with respect to a new program before taking any action to implement it.)

d. The Coordinating Council for Higher Education is designated as the State planning agency for post-secondary education for the purpose of federal legislation and federal programs.

7. In connection with the responsibilities of the Coordinating Council for Higher Education recommended in the report of the Select Committee and specified in the Donahoe Higher Education Act, the Select Committee recommends that the Council, after reviewing the Committee's recommendations, prepare a revised and updated Master Plan document.

The Select Committee is aware of several alternative-policy papers and studies that have been commissioned by the Joint Committee on the Master Plan for Higher Education and that bear on these topics, but which have not been completed in time for review by the Select Committee. It is recommended that:

8. The Coordinating Council for Higher Education and its staff should review the various alternative-policy papers being prepared for the Legislature's Joint Committee on the Master Plan and consider appropriate

responses that pertain to the subjects and recommendations made throughout the report of the Select Committee on the Master Plan.

9. *In the realization that the Select Committee has recommended in its report a number of added responsibilities for the Coordinating Council for Higher Education, and that these additional duties cannot be performed under the present staff limitations, the Select Committee recommends the augmentation of personnel sufficient to implement the recommendations proposed by the Select Committee and adopted by the Coordinating Council and Legislature.*

Chapter 1.6 of the Donahoe Higher Education Act goes to great length to declare the Legislature's intent "that each resident of California who has the capacity and motivation to benefit from higher education should have an opportunity to enroll in an institution of higher education." It outlines enrollment planning and admission priority practices for the two senior segments, and requires each segment to maintain records of the applicants who were denied admission and to report to the Legislature annually regarding the implementation of the enrollment plan and admission priorities.

Elsewhere in this report it is recommended that the Coordinating Council for Higher Education be charged with the responsibility of periodically reviewing segmental admissions requirements and of advising the segments and State government of any recommended modifications.

In connection with Chapter 1.6 of the Donahoe Act and the earlier Select Committee recommendation:

10. *The Donahoe Higher Education Act should be amended to charge the Coordinating Council for Higher Education with monitoring and reviewing the application of Chapter 1.6 and advising the Legislature accordingly.*

Coordinating Continuing Higher Education

The coordination of adult and continuing higher education has been a recurring subject of discussion at the State level for decades. A State Advisory Committee on Adult Education, formed in 1944 and reconstituted and reactivated in 1953, was organized to reduce undesirable overlapping and duplication of courses and programs by the various public institutions. The 1948 Strayer Report, *A Report of a Survey of the Needs of California in Higher Education*, pointed out an "urgent need for definition of the functions and areas of service to adults to be assigned to each segment of higher education." Several studies since the Strayer Report have indicated that the situation is basically unchanged. Although there presently is, in theory, a delineation of responsibility among the segments of higher education for this function, it needs to be reviewed. Until only recently, a similar need for delineation existed with the secondary schools and the Community Colleges. A new legislative statute now offers to make such delineation between the secondary schools and the Community Colleges in carrying out adult education responsibilities, but a need for a review of delineation exists among the systems of higher education in view of the forecasts of demand for adult education in the seventies.

Education for citizens beyond the traditional college-age group may become the most important single challenge for public higher education through the remainder of this century. Expanding opportunities for lifelong learning will require imagination and careful fiscal planning. To accomplish the coordination required in this context, it is urged that some delineation of responsibility and some delegation for coordination be effected. Both objectives--delineation and coordination--are consistent with the Master Plan for Higher Education and should be developed further in relation to adult and continuing higher education. The Select Committee believes that it is advisable to propose recommendations to advance these objectives and to stimulate further improvement in continuing higher education in California.

11. The Coordinating Council for Higher Education should develop and periodically review guidelines for the delineation of responsibility for adult and continuing higher education. The initial review by the Council should develop basic guidelines consistent with the new conditions of the seventies and the delineation of function specified in the Donahoe Higher Education Act.

12. The Coordinating Council for Higher Education, in consultation and cooperation with the California Community Colleges, the California State University and Colleges, the University of California, and

nonpublic institutions, should coordinate extended degree programs to avoid unnecessary duplication and wasteful competition. Coordination in geographic regions by intersegmental committees or consortia may be advisable in those areas where differentiated functions require programs by more than one segment in the same locality.

Promoting Educational Diversity

The effects of recent trends in the direction of developing large statewide systems of higher education and the resulting likelihood of uniformity are not exactly clear. However, there seems to be some indication, on the basis of the Select Committee's review, that in California public higher education diversity is beneficial and a superboard is not desirable. Furthermore, there are forecasts indicating that new methods and avenues other than the traditional campus programs will be developed to provide higher education. In this context, the Select Committee, here and elsewhere in this report, urges that diversity and flexibility be pursued in California higher education.

To encourage more educational diversity, as well as public participation and board involvement, it may be advisable to consider the creation or modification of local boards for each senior segment. This might take the form of more participation by the local advisory boards in the California State University and Colleges and the development of boards of visitors for each University of California campus. There are other alternatives that might be explored.

13. *The Coordinating Council for Higher Education should request that the Board of Trustees of the California State University and Colleges and the Board of Regents of the University of California, in consultation and cooperation with the Council, consider the need and desirability for study of alternate proposals to create or modify local advisory boards for each of their respective campuses.*

The tendency for each and every member institution of a large organization of higher education to adopt aspirations, goals, and programs similar to the most prestigious campus or unit in that segment is a particularly troublesome characteristic in multi-campus systems, both in the effect of stifling diversity (except in style, surface appearances, or organizational uniqueness) and in fiscal matters. For example, it appears to the Select Committee that any plan to make each University of California campus a "general campus," with the full range of doctoral, professional, and research programs similar to that of the Berkeley and Los Angeles campuses, exhibits this tendency. Equally, the recent designation of the majority of the former State Colleges as California State Universities may whet the aspirations of the remaining colleges within that segment to achieve the programmatic and quantitative measurements used by the Trustees and the Coordinating Council to justify the university designation.

The Select Committee suggests that the concept of "general campus," with all of its implications, be replaced by more clearly articulated

missions for each campus in the University of California. Secondly, the Committee doubts that the State can and will support the development of eight campuses with the full array of professional, graduate, and research programs of high quality that are associated with the popular concept of "general campus" as defined in terms of the University of California, Berkeley, and the University of California, Los Angeles. It would seem to be in the interest of strengthening programs and wise public policy for the University of California to continue to pursue the recent moves to designate more specialized roles for appropriate campuses. The same approach of designating or preserving specialized or regional characteristics and missions for campuses in the California State University and Colleges seems advisable for that segment also, particularly in graduate and professional areas of study. Furthermore, the Select Committee views this course as an additional method of creating diversity and recommends the following:

14. The senior segments of California public higher education should develop missions for their several campuses with more specificity and delineation than "general campus" or "statewide programs" and, apart from specific program review, seek the advice of the Coordinating Council for Higher Education concerning such delineation.

15. The Coordinating Council for Higher Education should undertake an evaluation of the desirability and need for the following:

- a. *regional California Community College districts with governing jurisdiction; and*
- b. *developing with the public senior segments, plans for any new campus in either system as an upper-level and graduate institution, or for converting an appropriate number of campuses in each segment into upper-level and graduate institutions.*

16. The Board of Governors of the California Community Colleges should develop regional academic and facilities plans and seek the advice of the Coordinating Council for Higher Education concerning such plans.

Developing New Delivery Systems

The task of developing new delivery systems and methods for higher education is not an easy one, but it is one that should be considered by the State in its efforts to provide new avenues of learning that will also make more efficient use of the State's resources. On the one hand, the competition for tax funds and the continuing current needs for additional dollars by the existing segments, institutions, and methods of instruction argue against proposals for new organizational structures that require substantial fiscal support. Projections of the costs of continuing current methods of delivery argue, however, that experimental efforts should be made to improve the availability of higher education to other than the traditional college-age group while trying to reduce unit costs.

In connection with the interest in new patterns of learning, the Select Committee has reviewed the proposal made by the staff of the Legislature's Joint Committee on Higher Education at an earlier time suggesting that California's institutions of higher learning be reorganized on a regional basis. After considering the regional concept and the need for mechanisms that offer new delivery systems and greater intersegmental cooperation, the Select Committee concluded that the utilization of varieties of educational consortia might meet several needs and recommends further action.

17. The State should encourage the establishment of regional higher education consortia, and the Coordinating Council for Higher Education is urged to fulfill its advisory role as catalyst, information clearinghouse, and assistant in the development of new and existing consortia.

a. Such consortia should have an intersegmental board to develop policy proposals for the respective boards and to coordinate and administer segmental policies for cross-registration of students, for continuing higher education programs, and for facilities utilization (including public libraries and facilities of private businesses and other organizations).

- b. *The consortia should also establish a multi-media division to develop, through maximum utilization of current capability of the segments if possible, production of academic instructional films and tapes; to develop contracts and procedures for utilizing educational and commercial multi-media facilities in the instructional process; and to coordinate the offering of televised and correspondence instruction for appropriate academic credit by member institutions.*
- c. *The consortia should also organize testing and evaluation centers for administering challenge examinations for credit, arrange for independent study and internship experience, develop cooperative and "on-the-job" programs and other educational experiences, and organize on-site instruction in business facilities in the region. In general, the consortia should place high priority on developing and utilizing community resources.*

Coordinating Policy for State Financial Aid

Four years before the adoption of the Donahoe Higher Education Act, the Legislature created the State Scholarship and Loan Commission to administer certain State financial aid programs for students. The Scholarship and Loan Commission was not incorporated into the Master

Plan, although several of the Survey Team's recommendations pertained directly to policies for student financial aid. In effect, it appears as if student financial aid programs were excluded from the policy and planning functions of the Coordinating Council.

The relationship of the State Scholarship and Loan Commission to the Master Plan structure was examined to determine whether the assumed conditions of the seventies require modification of the Plan. Since the Select Committee assumes that the recent growth in funds and function accruing to the State Scholarship and Loan Commission will continue throughout this decade, it seemed important to relate the policies and programs of that agency to the State's chief planning and coordinating agency for higher education. Policy questions concerning admissions, college-educated manpower needs and supply, and access and financing for minority students, to name only a few, are bound up with the program of the State Scholarship and Loan Commission; at the same time, they are key responsibilities of the Coordinating Council.

For example, in another section of this report, the Select Committee recommends that the Council be responsible for making reliable manpower information available to the segments and to secondary school counselors. Whereas, the State Scholarship and Loan Commission is presently urged by statute to consider the factor of manpower needs in the Graduate Scholarship Program, it would seem advisable to have a closer working relationship between those two agencies,

It would be helpful for State planning to develop meaningful and productive interrelationships of the State Scholarship and Loan

Commission and the Coordinating Council. There should be constructive methods by which the policies and plans of the financial aid agency might be reviewed by the planning commission as a facet of the State's comprehensive plan for higher education.

18. The Select Committee recommends that the advisory responsibilities of the Coordinating Council for Higher Education as specified in the Donahoe Higher Education Act, be made applicable to the State Scholarship and Loan Commission, and that the Council and the State Scholarship and Loan Commission establish a comparable, complementary, and cooperative relationship in policy development to achieve improved planning.

Articulation With the Public Schools

A critical area of articulation exists between the State's K-12 system and the higher education structure. It is critical not only for improved planning and more accurate projections, but also for developing better counseling and sound educational diversity. Recently, the articulation has been attempted by having a State Board of Education-member serving *ex officio* on the Coordinating Council, by the Superintendent of Public Instruction serving *ex officio* on the governing boards of the senior segments, and by segmental liaison with various levels of K-12 organizations.

Although the Select Committee has not had sufficient time to explore in depth this particular need, it has concluded that any

complete Master Plan for Higher Education should contain more adequate articulation in formal ways between the K-12 system-and higher education. It is aware of the work done in the past through the Articulation Conference but feels that more direct relationship between the Council and the State Board of Education, either by staff liaison, or otherwise, might assist in improving the relationships of secondary and higher education. It is recommended that:

19. *A joint committee of the State Board of Education and the Coordinating Council for Higher Education should be formed to explore and develop feasible and productive methods of articulation with the secondary schools and advise the segments of public higher education accordingly.*

CHAPTER II

ADMISSIONS AND OTHER ASPECTS OF EDUCATIONAL POLICY

Admissions

The 1960 report of the Master Plan Survey Team included the following paragraph:

Problems of selection and retention loomed large in the survey. *The quality of an institution and that of a system of higher education are determined to a considerable extent by the abilities of those it admits and retains as students.* This applies to all levels--lower division, upper division, and graduate. It is also true for all segments, but the emphases are different. The junior colleges are required by law to accept all high school graduates (even non-graduates may enter under some circumstances); therefore *the junior colleges must protect their quality by applying retention standards rigid enough to guarantee that taxpayers' money is not wasted on individuals who lack capacity or the will to succeed in their studies. If state colleges and the University have real differentiation of functions between them, they should have substantially different admission requirements.* Both should be exacting (in contrast

to public higher educational institutions in most other states) because the junior colleges relieve them of the burden of doing remedial work. Both have a heavy obligation to the state to restrict the privilege of entering and remaining to those who are well above average in the college-age group.¹

[Emphasis added]

The admissions policies set forth in the Master Plan sought to achieve a qualitative and quantitative distribution of students that would encourage them to attend institutions most appropriate to their prior academic performance, their aspirations, and their motivations and ability, and that would recognize the economic factors of college attendance. These policies were designed to encourage a comparable academic potential among lower division students in the two public senior segments and to preserve open access in the California Community Colleges. The latter constitutes the "open door" to higher education in California by giving to every high school graduate the opportunity to pursue studies in a public four-year institution if his performance in the Community Colleges demonstrates motivation and ability.

Key questions pertaining to the original Master Plan and to the current study of the Select Committee are:

- * how selective the admission requirements of the four-year segments must be to assure appropriate standards of challenge and achievement?

1. California State Department of Education, *A Master Plan for Higher Education in California, 1960-1975*, Sacramento, 1960 p. 66.

- * how should the different functions assigned to the segments affect selectivity?

The Master Plan provided that the University of California should select its first-time freshmen from among the top one-eighth of California high school graduates while the California State Colleges (now the California State University and Colleges) should select its first-time freshmen from among the top one-third of the State's high school graduates.

Is the University of California's assigned functions of research and of doctoral and professional instruction the primary basis that justifies the top one-eighth provision as distinct from the California State University and Colleges' top one-third requirement? Or is it that the different requirements and environment of the University historically have demonstrated that any significant expansion of the pool of eligible students would include substantial numbers who would not gain maximum benefit from the University's program or who would drop out as a result of the level of achievement required?

The definition of the upper one-eighth and upper one-third of high school graduates in California was delegated to the segments by the Master Plan. Currently, each segment utilizes different criteria to identify the one-eighth and one-third groups. The State University and Colleges rely primarily on performance in all high school subjects and on standard admission test scores. Likewise, the University uses a combination of high school scholarship and test performance; but it also demands the satisfactory completion of a selected pattern of courses in high school. There has been some attempt to relate these criteria to the percentage of the total number of high school graduates

qualifying under the requirements so as to set the eligibility cut-off points at the level consistent with Master Plan provisions. While there is some question about the exactness of this relationship, there is no doubt that admission of first-time freshmen in both senior segments is based on outstanding prior achievement levels as a predictor of probable academic success.

Although there seems to be no statistical evidence currently available to support the view that only those students who qualify under the one-eighth and one-third requirements can succeed, there is little evidence that tinkering with or making minor modifications in admissions standards would produce any significant beneficial result. This is due primarily to the fact that enrollments projected from the current eligibility pool will soon exhaust present and funded facilities. Major changes--for example, requiring both segments to select freshmen from among the top 50 percent of high school graduates--would likely produce higher attrition to preserve quality or would result in a lowering of quality. Either result would bring greater expense to the State and, above all, high personal costs to students. It was also concluded that significant liberalization of the freshmen admission standards could adversely affect the senior segments' capacity to accept transfers from the Community Colleges.

The differentiation of function concept that lies at the heart of the present system of California public higher education was judged to be sound by the Select Committee. It is partly related to the differentiation of admissions requirements of the three public segments for first-time freshmen. The Select Committee accepts the assumption that a past record of achievement and admissions test scores are proven

indices for predicting academic success in prevailing institutional environments, but it is not certain that they are the only indices. The Select Committee also supports the premise that the institutional and segmental mission determines the environment and expected norm of student performance and that a significant change of mission or method of implementing it could affect the admission requirements or vice versa.

Some well-known public universities define eligibility for admission to include all high school graduates, but this does not seem to be advisable for the California system at this time. A fairer line may be drawn between such broad eligibility requirements and the Master Plan requirements for admission to the senior segments. The provision for awarding credit for kinds of learning experience other than formal courses and the broadening of curricular offerings in the senior segments could justify modification of Master Plan requirements.

If the present admissions requirements for the University of California or the California State University and Colleges were substantially liberalized to create a larger pool of eligibles without significantly expanding facilities and funding for either, the effective change in access would be insignificant. Moreover, some of the most qualified applicants would likely have to be denied admission in order to admit lesser-qualified applicants. Nevertheless, to avoid rigidity in admissions requirements both segments should experiment to determine if criteria other than those currently employed can provide freshmen of equal native ability, motivation, and potential.

Policy concerning access to public institutions of higher education is a key component of a State's educational, social, and fiscal goals; as such, it requires considerable participation by public representatives in its formulation. This key policy affects the financial investment demanded from State revenues in a basic way, both for facilities and operating outlay. Furthermore, it affects political affairs, the social milieu, and the educational well-being of the State. Consequently, such policy should not be established solely by the institutions concerned. The Master Plan Survey Team seemed to acknowledge this by working out eligibility pools for admission that were interrelated in meeting the State's needs and resources. The following recommendation suggests a specific procedure for continuing that precedent. It is recommended that the California Master Plan for Higher Education include the provisions below:

- 1a. Admission requirements for first-time freshmen shall be appropriate to the delineated functions of each of the three public segments of California higher education. Requirements for the two senior segments shall be determined on the basis of high school achievement and/or other traditional and nontraditional criteria that reasonably predict success for the student; and the facilities and instructional support available and projected.*

- 1b. While it is the Select Committee's opinion that the present admission requirements utilized by the segments, subject to the large scale experimentation recommended, should be retained for 1973-74, it is*

recommended that the Master Plan provide for the Coordinating Council for Higher Education, in consultation with the segments, to review periodically the admission pools of each segment, and the admission requirements used to identify the qualified student, and to advise and recommend to the segments and State government any needed modifications, taking into consideration the progress reports on experimentation. The first review should be completed by June 30, 1974, for implementation in the 1975-76 academic year.

The 4 Percent Exception

For both public senior segments, the Master Plan stipulated that ...freshman admission through special procedures outside the basic requirements of recommending units of high school work or aptitude tests or both (such as specials and exceptions to the rules) be limited to 2 percent of all freshman admissions in each system for a given year.

The basic purpose of this exception rule was to admit students who had special skills, experiences, or qualifications.

This original provision for 2 percent was subsequently modified to add an additional 2 percent for minority applicants. The resulting 4 percent exception provision might wisely be modified to allow more flexibility and more responsiveness to changing needs. For example, 4 percent may be inadequate to allow significant experimentation in different admission criteria or much too low for a specific campus to

provide access for highly motivated, but culturally distinct-students in the immediate community.

Flexibility in applying admission requirements should be in the direction of opening up opportunities for students with high potential, motivation, and aspiration, particularly among the disadvantaged who do not qualify within the present achievement levels defined by the one-eighth and one-third requirements. In order to accomplish these purposes, the Select Committee recommends that a coordinated Master Plan provide the following:

1b. Both senior segments of California public higher education shall conduct controlled experimentation in admissions by modifying criteria and previous achievement required and report the results to the Coordinating Council for Higher Education.

1c. Each senior segment of California public higher education shall expand the percentages of admissions in exception to the published requirements to the degree that such expansion is educationally sound and is supported by appropriate programs and services. Priority for exceptions shall be given to the disadvantaged, veterans, and applicants with unique skills and abilities.

1d. Biennially, all public segments of California higher education shall report to the Coordinating Council for Higher Education concerning admissions requirements and definitions, as well as the criteria used for exceptions and

numbers of exceptions granted during the previous biennium. The first such report should be submitted by July 1, 1974.

Articulation and Distribution of Students by Level]

In order to reaffirm the policy of providing places for transfers from the Community Colleges, each senior segment should follow enrollment policies and practices, systemwide and campus-by-campus, that provide access for qualified Community College transfers.

The annual Articulation Conference and continuing efforts by the local campuses and central administrations of each public segment are constantly attempting to resolve articulation problems. Many problems remain, related to:

- admission to the campus selected by the Community College transfer student;
- accessibility to courses and majors desired once he is admitted; and
- acceptability of courses previously completed in the original institution for credit toward the major and degree.

Present policies of the two public senior segments concerning admission of undergraduate transfer students are:

- a. For students who were qualified for admission as first--time freshmen, both segments admit at any level with the same grade-point average required of their continuicg students.
- b. For students who were not qualified for admission as first-time freshmen: (1) the State University and Colleges require a minimum of 60 transferable semester credits with a 2.0

grade-point average, the same required of continuing students; and (2) the University of California requires 56 transferable semester credits with a 2.4 grade-point average.¹ However, a transfer student may be redirected to another campus of the University if enrollment quotas at the University campus of his first choice are filled.

The Select Committee recommends that California's new Master Plan should provide the following:

2a. All transfer students who have completed a minimum of 56-60 (as determined by the segments) transferable semester credits with a grade-point average equal to that required by the two senior segments of their continuing students shall be given all enrollment and program opportunities available to continuing students on a basis equal to those of continuing students.¹

2b. Transfer students who were eligible for admission as freshmen to the senior segments of public higher education and who have maintained satisfactory academic standing shall be admitted at any level under policies determined by the segments.

1. During the process of review by the Select Committee, the University of California has adopted on an experimental basis for three years a provision similar to Recommendation 2a and has begun to accept transfer students with the same grade-point average (2.0) required of continuing students. The University is commended for this action and is urged to share with the Coordinating Council for Higher Education its findings and evaluation of the experiment.

Modification of the required grade-point average for transfers originally ineligible as freshmen may increase attrition at the junior level. Nevertheless, the Select Committee believes that the modification not only will increase opportunity of admission to the University, but also will enable the University to achieve greater growth at the upper division level.

Institutional transferability with ease is important for students in all segments. For Community College students who have succeeded in their studies it is crucial and essential that they be able to transfer into senior institutions on a par with students who entered as freshmen and that they be given preference over those from out-of-state or from nonpublic California institutions.

Articulation needs related to the area of course accessibility are equally difficult to meet. It has been alleged that recent curtailment in the numbers of courses available to all students has led many campuses and instructors to permit pre-registration, thus limiting the availability of courses to incoming transfer students. Although this practice should affect the transfer student only during his first semester, it often delays his progress and, more importantly, suggests to him that he is a second-class student. The senior segments are aware of this problem and are attempting to eliminate it, but the Select Committee advises the following course of action:

2c. Each campus within the two senior segments of public higher education should implement measures to require that registration or pre-registration systems be designed to assure transfer students and other newly-admitted students equal opportunity to enroll in required and major courses.

The third area of dissatisfaction with articulation is common to inter-institutional relations throughout the United States. Usually, academic departments decide upon the acceptability of course work completed in other institutions; often, departments apply different degrees of acceptability to the same course from different institutions, dependent upon their knowledge of the content, and sometimes the faculty. It is rare for the acceptability of course work to be determined at the system-wide level. Nevertheless, it would appear that the effectiveness of the Master Plan and its tripartite structure is dependent upon a systems and segmental solution to this need. The Select Committee urges the segments to continue their present systemwide efforts and recommends that California's new Master Plan include the following:

2d. The Coordinating Council for Higher Education shall assume full responsibility for coordinating articulation processes among the public segments of California higher education.

The current Master Plan provides that the two senior segments achieve an internal distribution of undergraduate students systemwide that results in approximately 40 percent of the undergraduates in the lower division (freshman-sophomore) and approximately 60 percent in the upper division (junior-senior) of each segment by 1975. While this provision is not necessary at present to accomplish the original purpose of "diverting" students to the Community Colleges, it is consistent with the Master Plan's emphasis on effective articulation. Both senior segments should give high priority to retaining spaces at the junior level to accommodate all eligible transfers from the Community Colleges. While it may appear to be artificial to establish specific percentage quotas for the two levels

of instruction, it is important to reaffirm the policy of accomodating all qualified transfer students if the open door aspect of the system is to be maintained. It is also important that the senior segments' responsibility for lower division instruction within the current Master Plan be reaffirmed so as to avoid an *unplanned* transition to upper division campuses.

2e. Each public senior segment of California higher education shall determine the appropriate mix of lower division/upper division students, but such mix shall provide adequate spaces for all eligible transfer students from the California Community Colleges and shall not provide less than 30 nor more than 40 percent of total undergraduates in lower division.

Retention and Attrition

Retention and attrition statistics and other information available about the persistence of students to the completion of their degree programs indicate that there are many causal factors that influence the incidence of "drop-out" and "stop-out." These factors may be grouped as financial, motivational, and personal. Information available indicates that the majority of students who do not continue are *not* dismissed for poor academic performance.

A national study analyzing data on admission and persistence has indicated clearly that selectivity levels by high school achievement are related to drop-out and persistence (to degree completion). Persistence rates of students entering college with a high school average of B+ or above are estimated to range between 66 and 69 percent, with the highest persistence at the most selective institutions. On the reverse

side, data from the least selective institutions indicated that it was probable that 31 percent of their freshmen would not return as sophomores. Statistics from the most selective institutions indicated a 5 to 6 percent nonreturning probability. Institutions in the middle range of selectivity had a probability of 20 percent of their freshmen not returning for a second year. From these data, one concludes that an institution's selectivity level, the high school grade-point average of the entering student, and persistence and attrition are closely interrelated.

The magnitude of attrition is significant, but its seriousness may be debatable. The degree to which higher education experience assists students in deciding to "stop-out" of college to pursue other activities may be a positive value to the student and to society. Furthermore, participation in higher education for a period and extent less than completion of a degree should be considered a benefit both for the student and society. The number of stop-outs and drop-outs who achieve their objectives with less than a degree or who eventually complete a degree at some later time in life is unknown--although recent national studies indicate that eventual completion may be much greater than previously assumed. However, if students are forced to drop-out because of insufficient financial resources or by unchallenging educational programs, there is a serious deficiency in the system.

The segments of higher education should exercise greater efforts to analyze persistence and attrition factors in order to make constructive responses, one of which might be to develop and expand the application of policies that permit students to "stop-out" of college to pursue practical work experience, other kinds of learning, and socially useful pursuits.

Enrollments and Their Limitation

The Select Committee understands that all students qualified for admission to any public segment of higher education in California have been accommodated. However, not every eligible student is admitted to the specific campus for which he applied; some applicants in the senior segments are "redirected" to campuses other than the one to which they have applied. Redirection based on program specialization is understandable, but it is doubtful that redirection based on levels within the acceptable admission range is justifiable if it forces the student to relocate far away from his home community and makes it economically impossible for him to exercise his right to admission. The problems associated with redirection also relate to the questions of regional and statewide missions of the senior segments.

Nevertheless, it can be said that every qualified California student is presently accommodated somewhere in the system to which he applies. Enrollment projections for future years raise questions about whether this "guaranteed access" can be maintained without more than normal growth increases in State funding for facilities and operations. Some have suggested the imposition of enrollment quotas by majors and programs of study to reduce needs for additional funding. Future manpower needs should be projected as far in the future as possible for reliability, particularly for professional and graduate needs, and appropriate funding and policy responses should be made. But the assignment of quotas by fields of study at the undergraduate level is not a desirable alternative to the widespread dissemination of career opportunity information and the exercise of student choice.

Undergraduate education and experiences purposefully provide opportunity for general education and personal development that is applicable to all careers. While it is incumbent on the institution to make internal priority adjustments that place major fields of greater career opportunity ahead of those with lesser opportunity, externally imposed quotas by field do not seem to be educationally desirable. From a budgetary point of view, reduction in support for one undergraduate field rarely produces significant net savings; students who are unable to enter the unfunded program go into others that require added funding as the numbers increase.

It would seem more advisable to apply limitations to post-baccalaureate professional and graduate education, particularly doctoral work, because of the high cost of these programs. Nevertheless, the lengthy lead time required to adjust these programs and the imprecision of projections of personnel needs argue for moderation in adjustments.

Occupations and careers are experiencing rapid and fundamental changes; some are being modified significantly, some are disappearing completely, and new ones appearing. It is said that the present college graduate will have more than one occupational role during his productive lifetime. Moreover, colleges are able to "train" students only for the beginning phase of a career. There are recent indications that the meaning of work in the lives of young people is changing radically; no longer is work or career role the primary basis of self-identity and self-respect for many.

Such developments are slowly bringing a recognition that higher education should strive to develop the whole person in addition to providing an educational base for several careers over a lifetime. The

highly complex and organized world demands people who are broadly educated, not only to keep pace with change but also to resist the adverse pressures of specialization. Higher education should provide a broad range of adaptable intellectual skills and teach ways of approaching problems that are so fundamental that they will be useful throughout life's great variety of situations. In this process, education must promote the student's capacity to continue learning and to maintain a stable sense of himself in diverse roles.

Higher education that emphasizes broad personal and intellectual development is also designed to produce graduates who have career skills and qualifications in one or more areas. Institutions of higher learning have always sought to provide self-development and career training. It even may be argued by some that the latter is inseparable from the former. Avenues of occupational opportunity for the educated person must continue to be an integral part of collegiate education. But for the very reason that a broad emphasis on self-development may likely influence aggregate career trends and changes, rigid quotas by majors of study at the undergraduate level may be counterproductive.

Responsibility for official population and enrollment projections presently rests with the Department of Finance and its highly respected demographic section. As growth pressures on limited educational facilities and funds mount, the reliability and accuracy of the projections become more crucial to sound program and budget planning. In view of this relationship, the Coordinating Council for Higher Education should be involved more directly in the process. It is recommended that:

3a. *The Department of Finance or State statutes shall delegate to the Coordinating Council for Higher Education the function of making enrollment projections, in consultation with segmental representatives, and such projections should serve as the principal basis for planning, policy, and support for higher education.*

3b. *If segmental enrollment limitations by the State become necessary in the future, undergraduate and graduate quotas in totals should be preferred over enrollment quotas by field of study, leaving the latter to be determined by the public segments of higher education according to the resources available.*

Campus Size

The question of minimum and maximum size for various types of institutions continues to be a recurring and perplexing one. The Carnegie Commission on Higher Education has recommended the following "peril points" for specific types of institutions:

<u>Types of Institutions</u>	<u>FTE Minimum</u>	<u>FTE Maximum</u>
Doctoral-granting Institutions	5,000	20,000
Comprehensive Colleges	5,000	10,000
Liberal Arts Colleges	1,000	2,500
Two-year (Community) Colleges	2,000	5,000

These general guidelines compare with those suggested in the 1960 Master Plan as follows:

	<u>Carnegie</u>	<u>Master Plan</u>
University of California Campus	20,000	27,500
State Colleges		
In Metropolitan Areas	10,000	20,000
Outside Metropolitan Areas	10,000	12,000
Community Colleges	5,000	6,000 ¹

The Master Plan stipulated that the maximum enrollment suggested for the University of California's campuses "might be exceeded in densely populated areas in metropolitan centers." In all cases, the maximum proposed by the Master Plan for each type of campus is significantly greater than that proposed by the Carnegie Commission as a "peril point." Although the Master Plan maxima were not included in the Donahoe Higher Education Act, and therefore have never had the sanction of statute, they have been adopted by the governing boards of the University of California and the California State University and Colleges and by the Coordinating Council for Higher Education.

The maximum size and the rate of growth for each campus should be determined in response to the particular character of that campus and its programs, its local setting and ecology, and its organization and academic structure--in addition to economies of scale.

Recent concern about the extended-day utilization of facilities of public senior institutions (which is a much greater concern than for utilization of other State facilities) confuses the issue of maximum size.

1. In its 1964 Additional Centers study, the Coordinating Council used, as a maximum for Community Colleges, 7,500 full-time students or the equivalent of 10,275 day-graded students--to be exceeded in densely populated areas--and a minimum of 900 full-time or 1,233 day-graded students.

Increasing utilization as an economy move seems to argue for an increase in enrollment sufficient to justify extending daily operations of facilities from 5 p.m. to 10 p.m., as specified in Assembly Concurrent Resolution 151 (1970). The State might be better served by a policy derived from evaluating the educational and sociological impact as well as the economic results of the increased enrollments required for efficient facility utilization from 8 a.m. to 10 p.m.

Although most of the older, larger campuses of the University and the State University and Colleges seem organized and located in such a way to suggest that the maximum enrollments suggested in the 1960 Master Plan are the outside limits or beyond for optimum educational conditions, the size of each campus should be reviewed and guidelines developed for periodic review of maximum enrollments.

A study commissioned by the Select Committee to isolate the critical criteria by which maximum campus size is determined for senior institutions indicated that the conditions of each campus should be examined before the maximum enrollment is determined. The research concluded that such an examination should include educational programs to be provided, the economy of scale, the relationship of the campus to its immediate community, and the internal organization of the institution. The report recommends that these and other physical conditions be reviewed at enrollment levels identified as "peril points." ¹

Although the above research revealed that both senior segments have consciously applied many criteria for establishing the rate of

1. Robert V. Guthrie and Durward Long, *Criteria for Establishing Campus Size*.

growth and campus size, there is a tendency for policy makers to examine only the economies of scale in such decisions. If the State wishes the quality educational programs to which the goals direct it, new guidelines should be articulated that include educational considerations. It is for this reason that the Select Committee suggests the following action:

4. *Each of the three public segments of California higher education should develop guidelines for campus size according to educational and economic effectiveness, and on the basis of these guidelines determine the maximum size for each campus. This information should be reported to the Coordinating Council for Higher Education no later than July 1973 for its review and transmittal to appropriate executives and legislative agencies.*

The shortage of physical facilities projected for the two senior segments for the remainder of the decade should prompt State action or policy adjustment. The University of California will be facing space deficits that will make it impossible to accommodate the projected number of qualified applicants who wish to enter, unless the students themselves pay for the needed facilities. The California State University and Colleges to a much greater extent will be unable to admit all of the qualified applicants projected. There are efforts currently underway to provide external degree programs, to share or rent the

facilities of other institutions or organizations, and to utilize present facilities for a greater period each day. However, in the opinion of the Select Committee, these efforts will not be sufficient, without more fundamental changes in the current delivery system of higher education, to accommodate student demand in the last half of this decade.

The State should reaffirm its policy of providing access to higher education for qualified applicants by funding carefully planned and selected facility expansion or by the creation of several additional Learning Centers in locations where student demand exceeds facilities, While it is understandable that the University has been forced to resort to student charges to fund capital construction, this should be regarded as an improvised alternative since the responsibility is that of the State rather than the students. The State should determine maximum enrollments and support those enrollments by adequate capital and operational funding. Because the construction of facilities and the determination of enrollments have significant funding implications for operations, the enrollments, facilities, and operational aspects of the segments' activities should be related together in State policy decisions.

Student Options and Widening Opportunities

In discussions with individual students from high schools, Community Colleges, the State University and Colleges, the University, and nonpublic colleges and universities, a number of aspirations, needs, and interests were identified. They include the following:

- an increase in the flexibility of program requirements and evaluation of student performance, particularly by removal of near-duplicative required general courses;
- improved career counseling at all levels of education; more personalized approaches to education, including independent study, lower division seminars, peer-tutoring, and self-paced instruction;
- integration of academic programs with practical work experience;
- greater concern with the needs of ethnic minorities and economically deprived students;
- more consistent articulation policies and practices for students transferring to the senior segments; and
- greater continuity in and assurance of financial aid to needy students.

If the State's institutions can and will provide conditions to meet these needs and aspirations, it is quite likely that attrition rates will decrease significantly. Authority to respond positively to student needs remains, by and large, with the governing boards, the administrations, and the faculties of the segments of higher education. The segments are to be commended for the efforts presently underway to respond to these aspirations. Nevertheless, the Select Committee suggests that these efforts might wisely be expanded.

Secondary schools throughout the nation and in California have vastly increased the levels of achievement required in academic and college preparatory work in the recent decade. National studies of higher education have pointed to that development, as well as to the

increased maturity and sophistication of high school graduates. In addition, recent recommendations by the Carnegie Commission on Higher Education and other national and state studies have suggested that more student options should be provided to permit reductions in the time required for completion of academic degree programs. Currently, several possibilities do exist for accelerating the completion of baccalaureate programs, including advanced placement credit by examination, early admission, overload, and year-round attendance. The Select Committee commends particularly the California State University and Colleges for its systemwide efforts to develop and expand in an organized fashion these and other new approaches to higher education and encourages the expansion of nontraditional avenues to learning in all segments.

An important student aspiration that the Select Committee and the segments strongly support is the student's desire for more practical involvement in work experience, to observe and practice the application of knowledge in his field of interest. Work experience and internships are required in several programs of all segments of higher education and opportunities for such work-study experience are increasing. These opportunities should be expanded.

In each community there is a wealth of resources (personnel, institutions, facilities, programs) that could and should be utilized in the educational programs of colleges and universities within that community. These resources should be applied at all levels of higher education, particularly at the graduate level by the senior segments.

Legislation adopted in 1970 created the Public Service internship Program as a responsibility of the State Scholarship and Loan Commission.

The legislation makes the Commission a catalytic agent for the development, expansion, and improvement of internship programs, and an informational source for students desiring public service careers. The Select Committee supports the concept of the program and suggests its implementation as one alternative method of integrating work and college experience. The following recommendations should be implemented, where appropriate, to provide greater student options:

5. *The public segments of California higher education should develop programs in appropriate degree fields that provide students the option of completing a baccalaureate degree in less than four academic years of normal course work (the normal period for such programs would be reduced to three years). The segments are also urged to utilize or expand the use of advanced placement examinations and challenge examinations, such as those provided in the College Level Examination Program, for credit and to make it possible for students to avoid unnecessary duplication in subjects in which they have demonstrated competence.*
6. *Occupational curricula in the California Community Colleges should include options for program completion at an accelerated pace.*
7. *Each public segment of California higher education should provide work or educational "leaves of absence" without penalty to students in good standing; develop preferential systems of re-entry for such students over first-time applicants;*

and give serious consideration to a system of deferred admissions based on a work or educational plan submitted by the student, with the assurance of admission upon completion of the approved plan.

8. All public segments of California higher education should expand organizational approaches that permit student participation in small learning units, such as seminars; in self-paced instructional programs allowing for individualized rates of progress, thereby encouraging the exceptional student to complete his studies in a shorter time; and in "cluster" or "theme" colleges.

9. Academic departments and administrations of all campuses within California public higher education should consider, where feasible, integrating formal classroom instruction with some form of outside work experience. Both senior segments should devise programs in appropriate fields whereby consideration is given to "on-the-job" internships in conjunction with weekend seminars for certain master's and other degree work, both in external degrees and in regular programs. The Legislature should continue to expand effective ways of encouraging State and local governments to institute public service internship programs in concert with institutions of higher education.

In addition to the options recommended above, the Select Committee suggests that the society's needs and life styles of the seventies require opening up new opportunities and expanding current programs for collegiate study for citizens unable or unwilling to devote their full time to campus studies. More than ever before citizens want and society needs the implementation of lifelong learning.

The State should give greater priority to educational options other than full-time, on-campus programs, and give greater reality to the promise of continuing education, by providing more financial support for adult participation in higher education. As a beginning, the category of "defined adult," a concept that was developed to provide State support to Community Colleges at a level commensurate to the lower cost assumed to be required for programs for adults, should be eliminated. Furthermore, qualified students who wish to hold a job and attend college part-time should be assessed fees and funded equally to the full-time student in proportion to the work taken. Since this concept could open up new opportunities and create a stimulus to new options in higher education, the following policy recommendation is urged:

10. *All California resident students within the same public segment of higher education, except Extension students not in external degree programs, regardless of age, full-time or part-time status, should be treated equally in State funding and the assessment of fees in proportion to the course work taken and should have equal access to support services, excluding health services.*

The extent and effectiveness of lifelong learning in reaching those citizens who wish and need continuing or intermittent study is determined largely by the nature and cost of opportunities available. Historically, continuing higher education has been given second-class status in programs, fees, and policies for students by institutions and by State policy. More equity should be achieved.

Continuing and adult higher education is particularly affected by the fees charged in the senior segments for the variety of programs that are offered to students part time, on campus, and part time, off campus. Also affected is the relationship of extension and extended degree courses. Historically, University Extension has offered courses that may be utilized for degree credit at the campus where offered or for transfer to other institutions. Recently, because of withdrawal of State support, University Extension has charged fees based on full cost. Self-supporting student fees are charged for the off-campus external degree programs of the California State University and Colleges. The University of California's extended degree programs are classified as part of the regular campus programs and it is proposed that they be funded in the same manner as that program, but with administrative adjustments in the Educational Fee.

Charges for external degree work should not differ from charges for regular-degree work. If the charges are equal, the external degree program would be a viable alternative for young people and other adults who wish to choose that course as against a full-time, on-campus program. The State should not discriminate against the

citizen who chooses to hold a job and attend college part time as opposed to the citizen who attends college full time. In another chapter of this report, it is recommended that external and extended degree enrollments be jointly funded by the State and the participant in the same proportion of instructional costs as regular degree programs.

The Select Committee suggests, however, that nondegree work that is recreational or income-related should be funded for the time being primarily by the users. But there should be a recognition of the public service value of the noncredit and other activities of University of California Extension and the Extension program of the California State University and Colleges. This recognition should be formalized by the State by funding administrative capability for these and other programs that are in the State's interest. Recommendations for funding Extension and extended and external degree programs are included in the chapter on finance.

State policy for funding adult and continuing higher education should be developed in the awareness of the valuable and extensive evening programs and other adult education services now provided by many nonpublic institutions of higher education in the State and in consideration of the possible effects of new policy on their programs. Also related to the development of State policy regarding funding and charges for part-time students is the need to review the availability of institutional and State scholarships to such students. The Coordinating Council for Higher Education might wisely provide leadership in developing policies appropriate to these subjects.

Of all forms of higher education, adult higher education has the most immediate benefit return for the investment and can be expanded at little increase in cost when those programs are integrated, where appropriate, with regular programs. Campus instruction for adult and continuing higher education purposes may be expanded by adjustments in schedules, length of courses, and other conditions.

11. Each public segment of California higher education should strive to increase substantially the availability of weekend and evening programs of instruction and should examine carefully its service and relationship to the immediate community (including non-public institutions) in providing educational opportunities.

The educational opportunities for adults have been enhanced over the years by the cooperation of private businesses and education. In order to open greater avenues for higher learning, the cooperation should be expanded to the benefit of the employee, the business or industry concerned, and the taxpayers of the State. Collegiate courses delivered on-site in the employees' work location, either by instructors or by television instruction, offer expanded opportunity for all levels of college work. The variety of relationships possible in interinstitutional arrangements is almost unlimited. The current positive and beneficial efforts of all segments of higher education are commended, and should be expanded to achieve a better integration of institutions of higher learning and other public and social agencies,

business, industry, and arts and cultural commissions, and to achieve a better exchange of resources, including personnel.

12. Governmental units, private business and industry, public institutions, and the segments of California higher education are urged to adopt policies and effect cooperative arrangements for continuing higher education opportunities on-site and on-campus. These cooperative arrangements should be extended to include the sharing and exchange of information, facilities, equipment, personnel, and other resources. Colleges and universities are commended for utilizing professional expertise outside their faculties and are urged to expand the use of adjunct professors from business, government agencies, the arts, and professions.

Increased Use of Electronic Media

A study by the Carnegie Commission on Higher Education has suggested that, in the next decade, between 10 and 20 percent of on-campus instruction and as much as 80 percent of off-campus instruction will be installed via television, computers, video and audio cassettes and other electronic devices. The use of television and other electronic media including video tapes, video-tape cassettes, computer-assisted instruction, and similar aids

affords an opportunity for improving the variety and quality of education. The Select Committee is well aware, however, that it is not always more economical when such media are used to improve instruction and that start-up costs for media require substantial initial investment.

Creative and imaginative use of media, however, does offer the promise of benefiting both students and faculty. Students derive added depth and quality from presentations by the most outstanding faculty members in the given subject field and by the establishment of a tutorial relationship with those faculty whose lectures are replaced by the media presentations. Faculty are benefited by relieving many of them from repeated lecturing.

Many observers and participants in policy making for higher education have pointed out that the greatly accelerating costs of higher education have resulted primarily from increases in labor costs, particularly for faculty, without comparable increases in productivity. The financial situation of California higher education makes it imperative that meaningful steps be taken to halt the cost spiral and to increase the cost effectiveness of higher education. A number of persons have suggested that the answer lies in increasing faculty work loads. But inappropriate increases in work loads could result in a serious dilution of the quality of higher education received by the students and a reduction in the meaningful research by faculty members, which has served as a cornerstone of progress in our society and which is vital to creating truly great academic institutions of learning.

Higher education needs a breakthrough in the cost-effective use

of technology and the Select Committee suggests that the State and the segments of higher education should concentrate on the potential of electronic media in the seventies.

The Select Committee believes that the use of television and electronic media in California higher education can improve the quality and cost effectiveness of education for full-time, on-campus students at our institutions, and make available extended opportunities for the pursuit of academic degrees and intellectual and academic attainment and the broadening of cultural horizons for a great number of citizens of the State. Specific recommendations follow:

13. The State should support a feasibility study through the Coordinating Council for Higher Education to determine the relative effectiveness of the following two and other alternatives for funding multi-media and nontraditional approaches to instruction.

a. funding through each public segment of California higher education the utilization of electronic and other mass communications media in instruction; and

b. funding the implementation of new instructional approaches that emphasize the use of electronic and other mass communications media through a statewide grants committee consisting of representatives of California

*higher education, instructional technologists,
and television officials.*

14. The segments of California public higher education should take immediate steps to determine the cost/benefit relationships of the application of new policies and resources, electronic and otherwise, in education, and to improve the quality of instruction by such action. Such steps should include, among others:

a. implementing organized means for employing electronic media throughout the instructional process, with a particular emphasis on providing access for off-campus students;

b. adopting policies that permit students to enroll at more than one institution simultaneously without prejudice; and

c. developing policies concerning the rights and responsibilities for the development of new instructional materials (e.g., televised courses, programmed-learning materials) and for the interchange of these materials among the segments of higher education.

15. The public segments of California higher education should expand the utilization of multi-media and

televised instruction in their external and extended degree programs, which would, where possible and appropriate, make use of on-campus televised instruction to serve both campus and noncampus students.

16. *The public segments of California higher education should report to the Coordinating Council for Higher Education regarding steps being taken to implement a system of fiscal or other incentives to encourage and reward teachers for innovational and nontraditional instruction that permits productive gains in terms of unit costs without sacrifice of quality of instruction. The Council should review such information and advise State government on the feasibility of funding incentive programs.*

Counseling

From discussions with students and counselors from several levels of education, the Select Committee concluded that academic advising and counseling in all educational institutions needs improvement. Counseling has fundamental effects upon the lives of many students and is of critical importance in education. No counseling at all may be better than poor counseling. Both the high ratio of students per counselor in many secondary schools (600 students per counselor in some cases) and/or the ambiguity of responsibility for academic advising and for dissemination of career information in institutions of higher education makes it difficult, if not impossible, for students other than the

highly self-directed to secure adequate information and assistance.

All too often, budget restraints lead to the curtailment of counseling in secondary schools, in the Community Colleges, and in the senior segments. Career and personal counseling is rarely separated from academic advising. Improvements should be made to provide students with as much information as possible about educational and career opportunities.

Counseling services should be provided to inform young people about their opportunities in higher education, and about their alternatives to higher education. This process should take place at every level of education and in special community counseling centers, which should be developed by institutions of higher education, school districts, cities, or counties.

17. The California State Board of Education should actively encourage the State and local school districts to appropriate sufficient funding for an effective academic and career counseling program.

18. The segments of California public higher education should review their counseling programs and develop means of improving their content and availability; in particular, they should develop means by which the time contributed by regular faculty to academic and career counseling is counted as part of the assigned work load. It is further recommended that programs be expanded where needed to enable designated faculty members to become thoroughly prepared to perform the counseling function and

*that State funding recognize this essential activity
by providing sufficient budgetary support.*

Institutional Flexibility

Teaching and learning occur in a great variety of ways and settings in institutions of higher learning, as in all of life. Yet, it appears that variety has become unduly limited by the institutionalization of formal lecture, laboratory, and studio classes by the faculty and administration, and by budget formulae. Contact hours, credit hours, student credit hours, and the like have almost closed the opportunity for flexibility and innovation to teacher and student unless an extra price is paid by either or both to engage in other kinds of educational experiences. The reward system for the college teacher rarely encourages modification of the present instructional approach. The great investment of time and effort to develop multi-media and other approaches is not generally supported, and less often rewarded. Dedicated and time-consuming counseling by faculty through sustained personal contacts with students is given a low priority in the present system of promoting work-load definition and budgeting. The Select Committee urges more flexibility in these areas to improve the conditions for teaching and learning in all segments of higher education.

It is our belief that faculties are particularly aware of this need and are responsive to the demand for the development of new modes of learning, to the degree possible under current fiscal policies. It is also the view of the Select Committee that faculties can be more responsive under flexible budget measures and formulae. It is a fact

of life that educational practice and policy are often determined by fiscal policies. To call attention to the likelihood that inflexible budget formulae and regimented management audits or practices may inhibit desirable educational changes, the following recommendations are proposed:

19. *Central administrations, governing boards, faculty governance systems, and State government should make every effort in the allocation of funds to provide for and encourage the development of flexible local program budgets for each campus. These would provide the flexibility to develop and utilize a variety of patterns of instruction and academic programming and grant the campus authority to utilize funds within assigned limits, subject to strict accountability.*

20. *The administrations and the faculties of each segment of California public higher education should devise faculty work-load and reward policies that recognize and encourage new or improved methodology and innovations in teaching and counseling. State budget offices should recognize these varied functions in their analyses and should support the allocation of essential funds for research in and development of innovations in teaching and counseling.*

Aid to the Disadvantaged

The particular plight of high school graduates who are economically deprived but academically qualified for college is a subject

to which the Select Committee has devoted much study and thought. The Educational Opportunity Grants program, for students in all public segments; the College Opportunity Grants, administered by the State Scholarship and Loan Commission; and a variety of sources, including the federal government, are contributing to increased participation by the disadvantaged. Nevertheless, participation rates are still considerably below the percentage of the K-12 population for Blacks and Spanish-surname Americans. In 1970, American Indian and Oriental enrollments in each segment, as a percentage of total enrollments, exceeded the percentage represented by their respective ethnic groups in K-12 in California public schools. In other sections of the report, a substantial expansion of the College Opportunity Grants Program is recommended along with the adoption of additional policies that increase minority participation. Other approaches to providing incentives for greater participation should be investigated, such as the following:

21. *The Coordinating Council for Higher Education, in consultation with the State Scholarship and Loan Commission, shall investigate the feasibility of creating a scholarship program that allocates to each high school in California a number of scholarships in proportion to its enrollment of economically disadvantaged students.*

Students from Other Countries and Other States

The many positive values of heterogeneous institutions and the enrichment provided to California institutions of higher learning by

the presence of students from other states and countries are reaffirmed by the Select Committee. Students from abroad who return to their countries after receiving their college education in California often make significant contributions to their home countries. International communication is a significant by product that plays a positive role in education, economics, and foreign relations. The imposition of high out-of-state tuition has the effect, however, of restricting foreign student participation in and contributions to California higher education to the very wealthy. It also limits the flow of highly capable graduate and professional students from other states to California. To assist in retaining the dual contributions made by students from other states and from abroad, the State Legislature enacted Section 23754, *Education Code*, authorizing waivers for specified percentages of such students for the California State University and Colleges. 1

22. The Legislature should fund tuition waivers for each segment of California public higher education, and the governing boards of each segment should authorize a substantial number of tuition waivers for highly

1. Section 23754.4 of the *Education Code* provides an upper limit of 7.5 percent of nonresident undergraduate students who are citizens and residents of a foreign country then enrolled in the California State Colleges. Section 23754.3 stipulates that the Trustees have power to waive the tuition of a nonresident student, or a nonresident student who is a citizen and resident of a foreign country, who is a graduate student of exceptional ability and prior scholarship ability. The number is limited to 25 percent of the nonresident graduate students.

qualified nonresident American and foreign undergraduate students, and even more importantly, for nonresident American and foreign graduate students in the senior segments.

The Doctorate

In recognition of the fact that student aspirations, needs, and interests are directly related to the kind of teaching they experience in college, the Select Committee has reviewed the current and continuing discussion concerning the appropriate segment that should have the primary responsibility for the preparation of college teachers. We have also examined whether the Master Plan provision granting the University of California exclusive rights to award the doctorate should be continued. It is our opinion that, while the high costs associated with doctoral education should not be duplicated at this time by both senior segments, the traditional Doctor of Philosophy programs do not always prepare graduates for teaching as well as they might. In 1960, the Master Plan exhorted the University of California and other California institutions "to insure that those teaching possess the qualities not only of scholars, but of scholar-teachers" as well.

In the opinion of the Select Committee, the current provision for the awarding of the joint doctorate by the University of California and the California State University and Colleges and the nonpublic institutions should be reviewed by considering factors other than fiscal, although the latter is important. The impact of a joint doctorate is a positive factor in access, morale, and professionalism

that should not be overlooked. The question of whether the California State University and Colleges, now responsible for the preparation of teachers, should be authorized to offer the Doctor of Arts degree is a matter the Select Committee has discussed. Although there are educational considerations that strongly support such a new direction, there are equally persuasive fiscal and manpower-supply considerations that argue against initiating or increasing dramatically the number of institutions with authorization to award the doctorate. Furthermore, current provisions for funding would add unusually severe stress on teaching budgets if the State University and Colleges were to implement Doctor of Arts programs.

The Select Committee concluded that it is not prepared to judge whether the Doctor of Arts degree is appropriate and acceptable for college teaching generally. Strictly following the differentiation of function, however, may lead one to the conclusion that if the Doctor of Arts degree were to be offered as a degree for college teaching in the California system at any time in the future, it may be appropriate for selected State University campuses to offer it without increased research costs.

23. The University of California should continue to be the only segment of public higher education with the authority to award the doctorate unilaterally, but with the proviso that doctoral programs, including joint doctorates, be made more flexible to provide improved preparation of candidates for college teaching. The University should report its progress in making the

doctorate more flexible to the Coordinating Council for Higher Education by July 1, 1976, at which time the question of the authority to award the doctorate should be reviewed.

24. *The current provision for the awarding of a doctorate jointly by the University of California and the California State University and Colleges, and jointly by the latter and nonpublic institutions, should be continued.*

The subject of joint doctorates stimulated a consideration of additional jointly articulated programs between the segments. Instruction in the health sciences is of particular importance in California and other states at this time. Faced with facilities and other shortages, the State has recently enacted legislation to provide contract funds to independent institutions to assist in training physicians to meet the State's needs. It might be appropriate to also encourage cooperative, jointly articulated programs and consortia in the health sciences and other fields between campuses of the University of California and the California State University and Colleges and other local medical and health institutions. The Select Committee recommends that:

25. *The Coordinating Council for Higher Education, in consultation with the two senior public segments of California higher education, should conduct a feasibility study or pilot program to develop jointly articulated programs in the health sciences and medicine.*

Faculty

An essential component for California's outstanding system of higher education is a faculty that is superior in training, ability, and motivation. The quality of the instructional process is naturally and inextricably related to the quality of personnel who do the teaching, perhaps even more than the natural ability and potential of students. In the building of a superior faculty, a system of higher education must apply policies and practices of recruitment and retention that are appropriately selective.

The 1960 Master Plan Survey Team projected shortages of faculty for the sixties and recommended action to improve the supply and quality of college and university teachers. Perceptively, however, the Survey Team indicated that projections of demand and supply pointed to a balancing of supply with demand in the late sixties and a slight surplus of faculty in 1971-75.

Present conditions verify the accuracy of that projection of a probable surplus in the seventies. It is fairly clear that the supply of qualified college and university teachers in the foreseeable future will be greater than the availability of positions for them.

When a major cause for the "over supply" is the shortage of new positions because of a slowing of enrollment growth, it is certain that recruitment and retention assume a greater importance in building or maintaining a quality faculty. The filling of each available position becomes a challenge.

Current enrollment projections for California and the nation for the next decade and beyond point to a gradual decline in the rate of

increase to the early 1980's, when there will be no increase in college enrollments if the age group presently served continues to be the primary clientele. In fact, enrollment projections for the early eighties show a net decline in college enrollments from the late seventies. If these projections are correct--and they may be high--there will be little growth in enrollments in the eighties.

Such projections indicate that there will be few new teaching positions created if the present student-faculty ratio and the present methods of instruction are continued. Newly qualified faculty will be needed only as replacements for retirees, deaths, and those leaving teaching for other professions. The net meaning of the projected trend is that the faculty that is recruited and retained in this decade will be the faculty of the eighties and perhaps into the nineties.

The State's ability to recruit and retain outstanding faculty is related fundamentally to the level of compensation, the rigor of selectivity, and favorable professional conditions, including a public commitment to the worth and value of education at all levels. In terms of maintaining staff morale and performance effectiveness, it is imperative that comparability in faculty compensation be maintained on an uninterrupted basis at all levels for all segments.

26. Faculty salaries and benefits in California public higher education must be competitive with those provided in comparable institutions. They should not be allowed to lag or, as between the segments, to become disproportionate for comparable educational function and faculty obligations.

Uncertainties regarding final budgetary decisions of the State in salary increments and in authorizing new positions for the senior segments have further complicated efforts to recruit and retain a superior faculty. The lack of consensus about funding formulae and methodology and a budget determination date in the summer preceeding the fall for which the budget is effective, are serious handicaps for faculty recruiting.

It is extremely difficult to secure outstanding teachers in July and August for the academic year that begins the following September. In the State University and Colleges, the effect has been to fill a third of the "probable" vacant positions prior to May and another third between May and September. After that date, the remaining one-third is utilized for part-time appointees.

27. The Legislature should establish a system of advance authorization with respect to budgeting faculty and staff positions for the senior segments of California public higher education in order to make possible greater stability in planning and operations in higher education.

28. Salary adjustments for faculty in the two senior segments of California public higher education should be determined for the next fiscal year by State government sufficiently early in the spring so that they may favorably affect recruitment and retention of faculty.

There has been a consistent trend over the last five years (1965 to 1971) toward a concentration of faculty in the top ranks in both senior segments, particularly in the University of California. In both segments, the percentage of faculty at the rank of instructor has declined markedly.

There also has been a parallel increase in the percentage of faculty with tenure in the senior segments. In the University of California, 51 percent held tenure in 1969-70, but two years later the percentage had increased to 59 percent. Tenured faculty in the California State University and Colleges constituted 54.7 percent in 1967-68 and 55.5 percent in 1971-72.

If the supply of teachers continues to exceed the funded positions available on the national and State scene, the situation will likely influence a continuation of the trend toward increasing the percentages of tenured faculty and toward increasing the percentages of faculty at the top two ranks. Without policies and practices that assure selective recruitment and retention it will be difficult to improve and maintain superior faculties that include a continuing supply of fresh and recently trained teachers and the very best of the current faculty.

29. The tenure concept as it may apply to all or any of the public segments of California higher education should be reviewed after certain national studies, scheduled for completion this year, are released. Whatever procedure for faculty employment, retention, and promotion is ultimately adopted, provision should be made for

differential pay or other recognition for meritorious performance. Probationary periods for faculty prior to tenure in all public segments should more closely approximate the seven-year maximum probation period utilized by the University of California.

The situation is further complicated by the need to provide opportunity for new additions to faculties that include greater numbers of women and members of minority groups. Because of the growth pattern projected in enrollments for the seventies, the last part of this decade is crucial for making these additions to achieve a more equitable participation. The positive steps taken by the segments to improve opportunities for minorities are commended and must be continued.

30. Efforts shall be increased to recruit a greater number of qualified women and minority faculty for vacancies in all public segments of California higher education to achieve significantly greater participation during the next decade. To accomplish this objective, efforts should be made to encourage the preparation of women and minority students for college and university teaching and administration.

Research

The Select Committee has indicated in several discussions that the research function carried out within the State's system of higher education should receive careful attention and deliberation because

of its importance to the State educationally, to humanity in general, and to the professionals who carry out the educational mission. The present Master Plan and the Donahoe Act give both senior segments responsibility for research, with the University of California designated "the primary state-supported academic agency for research," and the State University and Colleges authorized to perform "faculty research . . . to the extent that it is consistent with the primary functions of the state colleges and the faculties provided for that function."

Faculties of outstanding institutions, lay task forces, and special review committees that have studied higher education in other states, have described the integral role of research in higher learning. It is a professional obligation of a community of scholars to contribute to the growth of knowledge in general and a more specific obligation to assist those who need the resources of higher education to solve problems of the community, state, or nation. Moreover, faculty members who are active in research will likely be more effective and stimulating teachers than those who are not.

The creative process of searching and discovering gives an institution of higher learning a vitality and spark that cannot be achieved by any other activity. Teaching is of fundamental importance and efforts to improve that function should never be spared, but the research function in a community of scholars must not be neglected either. Research by a community of teacher-scholars keeps the institution and the State pressing forward as the cutting edge of new developments in all fields.

The University of California has traditionally included research with departmental instruction in budgetary requests to the Legislature, has received, in addition, State support for organized research, and has generated large sums of extramural funds for contract or project research. In 1970-71, total University expenditures for organized research (excluding the major laboratories and departmental research supported by the Atomic Energy Commission) totaled approximately \$191 million, of which about \$40 million were from State funds. Since more than half of the \$40 million was earmarked for research by the Agricultural Experiment Station, the remainder (\$20 million) went to a relatively few units working on specific problems of particular concern to Californians, such as air pollution. To this amount was added about \$2 million from the University's contract overhead funds. The total of State funds appropriated for the University of California for organized research other than the Agricultural Experiment Station amounted to an equivalent of \$1.00 per Californian.

The California State University and Colleges has received little if any support for "faculty research consistent with the mission of the state colleges." The 1971-72 budget for that segment contained 21.7 positions for organized research, all of which was contract research with external agencies. A Coordinating Council report of the late sixties, however, concluded that superior education and quality teaching in the State University and Colleges require on-going research by faculty in their instructional fields. The conclusion is applicable also to Community College faculty if the content of teaching is to keep pace with the current body of knowledge.

Over and above the value of academic and intellectual pursuits, there is convincing evidence that the application of research assists State planners, improves the quality of life, makes substantial contribution to economic development, and develops new concepts in all areas of life. Therefore, the Select Committee recommends the following:

31. Research should be an integral function of all segments of California higher education. However, State-funded research programs for public institutions should be in accordance with the delineation of functions among the segments as provided in the Donahoe Higher Education Act.

a. Research related to the teaching function should be financed by the State in each of the three public segments; for the California Community Colleges, the State shall pay its appropriate share. Each of the segments should seek federal and foundation funds to finance research related to the teaching function.

b. Applied research is appropriate to the three public segments and should be funded from whatever sources are available.

c. State-funded "pure research," not necessarily related to the improvement of instruction or

to applied research, should remain the province of the University of California, which should continue to be the principal State-supported academic research agency.

- d. Research and development in the improvement and innovation of teaching belongs to all three public segments, with emphasis in the California State University and Colleges in view of the fact that they are engaged so extensively in teacher training.*

CHAPTER III

FINANCE AND THE UTILIZATION OF RESOURCES

California has demonstrated a firm commitment to higher education for more than a century. For most of the State's history its citizens have supported general taxation to make it possible to provide higher education with little or no tuition to the student. With continually increasing costs for higher education, as well as for other State services, and with growing numbers of students, there is a need to reexamine the policy of tuition-free education, which is also a key provision of the Master Plan.

Financing Higher Education

Who does pay for higher education, who should pay, and how much should they pay? Both the student (and his family) and the public pay for his education. The student who chooses four years of college, rather than taking a job, gives up some or all of four years of earnings to do so--perhaps as much as \$20,000--which might otherwise have supported him and his family. He also pays out from \$1,000 to \$12,000 in tuition, fees, and costs of books and materials, depending on the charges at the institution he attends. Thus, his choice of a college education means that the student and his family have invested from \$20,000 to \$40,000 in his future.

If a student goes to a public institution he is supported through

State and/or local taxes at an average (1970) expenditure of \$1,670 per year--perhaps half that much for a year in a Community College, or several times that much for his fourth year in certain professional programs. The public thus invests on the average some \$6,700 in his undergraduate education, and may invest twice that amount in certain subject fields.

Both the student and the public, on the average, profit from their investments. Lifetime earnings for a college graduate historically have been much higher than the earnings of a high school graduate. In addition, the college graduate--again, on the average--obtains many non-monetary benefits: a more interesting job, more awareness of himself and the world, and more satisfaction from his vocation and avocations.

The State also benefits. Part of those increased earnings of college graduates come back to the State as taxes, and the graduate is less likely to cause the State costs for welfare benefits or crime control. But the primary benefit is that the college graduate makes a greater per capita contribution to the economy and civic life of the State. A more prosperous economy benefits all the citizens of California, as well as the State government. The State receives intangible benefits too: a more informed citizen and one more likely to participate in community and State affairs.

Most economists would agree with the statements above, but they would disagree on methods of calculating the benefits to the individual or to the State. The Select Committee does not know how to put an exact dollar value on these benefits either. It appears probable that on the average both the individual and the other citizens of the State

ultimately profit five to tenfold on the investment in his education, in addition to the intangible benefits we have cited. The increase during this century in the level of education of California's labor force is one important reason for the expansion of the State's economy. Continued investment in education will assist in maintaining economic strength and productivity.

It appears, then, that in due course everybody gets his money back from higher education--and more. But what does it cost now, what will it cost in the future, and who will pay the bill?

California, as the nation's most populous state, spends more on higher education from State and local taxes than any other state. In 1970-71, the State General Fund provided about \$820 million to higher education, representing approximately 17.4 percent of the total General Fund revenue of \$4.7 billion. The State's total personal income was nearly \$90 billion for 1970-71, of which less than 1 percent went for State support of higher education. State spending for higher education the previous year, 1969, ranked 36th among the states in expenditure per full-time student in higher education. In per capita State and local taxes spent for higher education in 1969-70, California ranked 16th among the states.

According to projections of personal income, General Fund revenue under present tax laws, increasing costs, and enrollments in higher education for 1980, there will be a gap between State tax funds and the costs of higher education. Personal income will likely double by 1980, according to Department of Finance forecasts, and the total costs of higher education will probably double also, but without an equal increase in General Fund revenue. Neither is it likely that the dollars

provided by the percentage of the General Fund presently received by higher education will double. If tax support and other sources of funding fall short of doubling, California will be unable to educate by current methods the number of students expected to seek admission to public institutions in 1980.

The Select Committee believes that this funding problem presents an even more difficult challenge than that of the last twelve years, when the number of students doubled and costs rose more than fourfold. The share of State revenues allocated for higher education is now larger than in 1958, but the competition from other demands on the State's revenues is more acute. We therefore expect that even closer attention must be given to possible additional sources of revenue and to minimizing increases in the cost of education. This brings one back to the original question of who should pay and how much?

Answers to these questions are provided, in part, by the philosophical assumptions one holds about the public and private benefits accruing from higher learning. They, in turn, determine in great measure the system of financing for public colleges and universities.

One system or approach to financing is that of the California Master Plan, the free or non-tuition system. This approach provides instruction at no direct cost to all qualified citizens by full public support of institutional costs. It assumes that the cost to the State's taxpayers is more than repaid by public benefits and by higher personal taxes paid later by participants in higher education. A second alternative is the full-cost pricing system that requires each participant-recipient to pay the full cost of instruction or other services he receives. This method usually includes State subsidies

directly to certain individuals according to their ability to pay (by vouchers or scholarships), thus permitting them to "purchase" higher education. A third system of financing relies in great measure upon public appropriations to institutions for the costs of instruction and instructional support, but also requires participants (or "users") to share directly in the costs. All three systems, with a number of variations in each, were studied and discussed and the Select Committee reached the following conclusion:

- 1. It is recommended that the present method of funding California public higher education predominately through institutions be retained as the primary method of State financing of higher education, and that this method be accompanied by a more clearly defined tuition policy and a substantial, extended student financial aid program.*

The Question of Tuition and Student Charges

California's Master Plan for Higher Education assumes that society is the primary beneficiary of a system of public higher education that provides equal opportunity for participation by all its citizens who are motivated and qualified. The Select Committee explicitly reaffirms this assumption and urges the complete attainment of the goal of equality of access in the current decade.

In order to achieve the broad access of qualified and motivated students to higher education, the Master Plan recommended that there should be no tuition charges for California residents to enroll in public institutions of higher learning. However, the Master Plan did

suggest that students should pay certain direct charges, and recommended that each system "devise a fee structure and collect sufficient revenues to cover such operating costs as those for laboratory fees, health, intercollegiate athletics, student activities, and other services incidental to but not directly related to instruction."

At the time the Master Plan recommendations were made (1960), and since that time, there have been legal grounds for tuition in the University of California and the California State University and Colleges, despite widespread impressions to the contrary. The Regents have the authority to impose tuition by virtue of their constitutional powers and possibly by Section 23051 of the *Education Code*, which states that "an admission fee and rate of tuition fixed by the Board of Regents *shall be required* [Emphasis added]

In the case of the California State University and Colleges, Section 23753 of the *Education Code* imposes a limit to Tuition Fees of \$25 per year. Tuition Fees were charged and identified as such by the then State Colleges from 1933 to 1953. In 1953, the Tuition Fee was \$13 per year and the Materials and Service Fee \$17 per year. In 1954, the Tuition Fee was eliminated and the Materials and Service Fee was set at \$40 per year.

For each of the two senior segments there appears to be no legislative or constitutional prohibition against tuition, although there is a specific limitation in the case of the California State University and Colleges. It seems clear that the Legislature, in its budget approval powers, may directly approve or disapprove tuition amounts recommended by the Trustees of the State University and Colleges. It is not clear whether the Legislature, explicitly or implicitly, defines

its power to include the approval or disapproval of tuition or levels of tuition actually set by the University Regents.

It is generally believed that no tuition can be levied by the Community Colleges without express statutory authority, which now exists only for nonresident and adult charges.

At the present time (1972), both senior segments assess students mandatory charges, ranging from \$118 per year in the California State University and Colleges to over \$600 per year in the University of California. If "tuition" is defined to mean payment of salaries of teachers, neither segment charges tuition. The real issues are the mandatory cost of education to the student in direct payment to the institution and the enrollment patterns stimulated by the disparity of costs between the senior segments.

Presumably, the original purpose and justification of the no-tuition principle was to assure student access. By gradually adding fees for many purposes of expenditure, other than salaries of teachers (tuition), student charges may indeed become restrictive to the point of making the no-tuition principle irrelevant, and at the same time provide little improvement in direct instruction, a primary mission of higher education.

Data suggest that enrollment pressures and fiscal demands for operating funds and physical facilities will become severe for California's public institutions of higher education before 1980.¹ Along

1. Even at the current rate of participation of the "college-age" population, the State Department of Finance projected in 1972 an additional 300,000 students by 1980.

with this increase in numbers there likely will be a gradual increase in per-student cost that will create a significant gap between projected income from present sources and costs of operation. The Select Committee is also mindful of the personal benefits of higher education, as well as the current direct costs to students and their foregone earnings.

It is the Select Committee's view that the present manner in which public policy relating to student charges is decided leaves much to be desired. Therefore, a series of recommendations on State policy concerning student charges is offered:

2a. The Legislature and the Governor should clarify public policy by legislation or constitutional amendment concerning student tuition and other charges in California public higher education.

2b. The California Community Colleges, to which all high school graduates are qualified for admission, should continue to remain tuition free. In this connection, it is also recommended that the existing limitation of State funding for Community College students over 21 years of age be removed and that all students, regardless of age, part-time and full-time, following graded programs on any day or night of the week, be funded on an equal basis and that a system of financing should be developed that takes into account local resources for funding quality programs; and the State's share of

Community College financing should be increased to 50 percent at the earliest possible date.

2c. Resident students with the ability to pay should share in the direct costs of their instruction at both the University of California and the California State University and Colleges. It is recommended that such charges be set at the lowest practicable level but should not in any case exceed the median of like charges at comparable public institutions in other states (those public institutions used for faculty salary comparisons).

2d. The State should provide the necessary instructional physical facilities for the University of California and the California State University and Colleges.

2e. The State should avoid utilizing funds derived from tuition and other student charges for financing the construction of physical facilities for instructional purposes.

Improving Access to Higher Education

A continuing concern of the Select Committee and of all who are interested in achieving the unfulfilled promises, of higher education is the development of methods and funding to assure full participation by the economically disadvantaged. Because of the present disparity in the ratio of minority participation in higher education as compared to the ratio of the minority citizens in California's total population

and the total enrollment in kindergarten through senior high school (K-12), special effort must be continued and increased to identify, encourage, and support qualified and needy minority students.

In 1970, minority students comprised approximately 22 percent of the Community Colleges' day students, almost 14 percent of the University's enrollment, and about 15.5 percent of the State University and Colleges' enrollment, as compared to 28 percent of enrollment in K-12.

The College Opportunity Grants Program, administered by the State Scholarship and Loan Commission, should be one of the principal vehicles in implementing key programs to improve this effort. Present statutes authorize 2,000 new grants per year through 1976-77, The State Scholarship and Loan Commission has requested, and the Governor has recommended funding, 2,000 new College Opportunity grants for 1972-73 as compared to 1,000 new grants for 1971-72. This increase provides assistance for 3,814 (2,000 new, 1,814 renewals) students for 1972-73. At that level, if constant through 1976-77, approximately 7,000 students may receive grants in 1976-77. It is the Select Committee's opinion that the number of new grants should be increased substantially each year so as to achieve a minimum of 10,000 grants by 1976-77. This will require a minimum increase in the number of new grants of at least 1,000 per year over the previous year through 1976-77.

These grants should be awarded on the basis of economic need to students who are most qualified for admission by regular admission requirements.

The Select Committee supports the financial-aid package concept that requires the student to participate meaningfully in supporting

himself and his educational costs by work-study, loans, and similar means. While we are well aware of the discouraging effect of large burdens of debt for students at graduation that results from requiring full repayment of educational costs, we suggest that work-study and partial repayment of direct public grants constitute an important aspect of self-fulfillment and demonstrates concrete motivation for higher education on the part of the student. The availability of loans at no- or low-interest rates to students who desire them should be an integral part of the State's system of financing higher education.

3. *The Select Committee urges the attainment of the goal of equal access to California higher education in the current decade to assure that no qualified and equally motivated resident shall be denied the opportunity of higher education because of financial need. Financial assistance from the segments, governmental agencies, and all other available sources, should be provided to those in need through appropriate combinations of scholarships and tuition grants, work-study, loans, other special purpose grants, and through a substantial expansion of the College Opportunity Grants Program.*

As an additional approach to making educational opportunity more equally available to all citizens, and as a means of "opening up" higher education by alternate delivery systems other than the full-time, on-campus method, the Select Committee advocates greater support for part-time and off-campus collegiate study. For example, it would

appear that charges to students for external degree work should not differ from charges for regular degree work. If the charges are equal, the program would be an equally viable alternative for young people who wish to choose that course as against a full-time on-campus program. It would also provide to other adults an opportunity to participate in courses leading to a degree at costs similar to that charged the on-campus student. Accelerating demands for continuing higher education for the adult who has one college degree, as well as for those who have little or no collegiate work, require a more balanced funding system.

4. External and extended degree programs offered by the public segments of California higher education should be funded by the State and the student in the same proportion of costs as regular degree programs.

In this context, it is the view of the Select Committee that non-degree work provided expressly at the request of professional groups--particularly in law, education, and medicine--for income-related advancement in the field should, appropriately, continue to be funded in greater part by the "user," as they are at the present.

University of California Extension and the Extension program of the California State University and Colleges have provided inestimable service to the people of California by being willing and ready to fulfill educational needs not possible to meet in other ways. While the Select Committee believes that in general these services and programs should be financed in the same manner as the nondegree programs mentioned

above, it would seem to be in the State's interest to provide support for a minimal administrative structure that creates the "ready to serve" machinery for the delivery of programs on request for which there is a demonstrated need. It would seem that, as particular programs vital to aspects of State development are identified and approved by the Executive branch and the Legislature, more program support should be provided if needed.

5. University Extension and the California State University and Colleges Extension should be provided State funding for administrative capability to respond to public needs. All other State funds should be provided upon advance program approval by the Legislature.

Quality, Costs, and Differentiation of Function

In our review of the assumptions and provisions of the Master Plan, we find that it was in great measure motivated by a desire to construct a system that would provide the highest quality education at a reasonable cost to all who would qualify for admission. The purpose of the differentiation of function concept, which designated different educational emphases among the three segments of public higher education, was to achieve quality at the lowest possible cost to the State. In our opinion, the implementation of this concept has contributed to the State's ability to provide broad opportunities to its citizens and to produce a system of higher education that includes:

- a University system that is noted world-wide for excellence, particularly in its specialized functions of research and

- instruction in the professions and in other doctoral fields;
- a State University and Colleges system that ranks among the best and largest state university systems in the nation in instruction at the baccalaureate and master's degree levels; and
 - a Community College system that is outstanding in providing a broad range in lower division collegiate and career education programs.

This specialization and differentiation of function has served the State well in qualitative and quantitative terms and should be continued. Moreover, the Select Committee recommends that the University of California carefully consider and evaluate the positive benefits in enhancing the quality of current programs and in minimizing new program costs that may be achieved by specialization among its campuses, thereby limiting certain doctoral programs to an appropriate number of its campuses. The Select Committee urges the University of California to make every effort, including redirection of graduate students, to avoid unnecessary duplication of doctoral and other high-cost programs among its various campuses and to emphasize on each campus, at the graduate and professional school levels, its mission of serving statewide educational speciality needs.

The California State University and Colleges' function of providing baccalaureate and master's instruction in the liberal arts, architecture, education, business, engineering, and other fields specified by the Master Plan, should be continued. The recent change in the name of the "California State Colleges" to the "California State University and Colleges" has been reviewed by the Select Committee in the context

of the Master Plan and in view of the concept of specialization of function. The Select Committee is in agreement with the position of the State University and Colleges and the Coordinating Council for Higher Education that the change in name does not and should not imply a change in the current function of this segment.

The Select Committee has reviewed the responsibility of the Coordinating Council for Higher Education for interpreting the delineation of function. In this connection, the Select Committee finds the recent agreement of the public segments and the Coordinating Council concerning the Council's review of new academic programs encouraging and consistent with that function. We commend the Council and the segments for the establishment of guidelines and procedures governing the Council's review of new academic programs.

In the opinion of the Select Committee, the differentiation of function concept provided by the Donahoe Higher Education Act should be retained as a means to achieve quality, diversity, and specialization at favorable cost/benefit results to the State and the student. This concept should be strengthened, as is recommended elsewhere in this report, by the Coordinating Council's review and advice to the public segments and State government concerning new and continuing academic programs, particularly graduate and professional programs and schools; as provided in the Donahoe Act.

Utilizing Facilities and Resources

There should be continued efforts to develop methods to improve cost effectiveness and efficiency in utilizing human, fiscal, and physical resources and to develop more refined output measures by

which the segments, the public, the Legislature, and the Executive branch of State government can evaluate the effectiveness of higher education. Each public segment and each campus within the segment should carefully analyze the relationships between the use of resources and the accomplishment of goals, seek maximum economies with minimal sacrifices in quality, and encourage rapid and flexible adaptation to changes in educational, research, and public service programs. Improved utilization of resources and sound planning are essential components of the Master Plan to enable the State to achieve the goals of widespread participation in higher education.

The need for maximum utilization of resources is demonstrated by a review of the projected physical facilities available for the enrollments that are forecast. According to the 1970 Report of the Legislative Analyst, enrollments projected for the public segments in the seventies will result in severe deficits of physical facilities, deficits approximating a total of 150,000-200,000 FTE students for which no provisions have yet been proposed.

Although these data are based on population projections that have since been revised downward and on standards of utilization that have been revised upward by the Legislature, the Department of Finance and the Coordinating Council, it is clear that deficits in physical facilities could be very substantial in the 1979-1980 academic year unless alternatives to current methods and locations of providing higher education and changed physical facilities needs are planned and implemented.

In planning for maximum utilization of resources, those offered by the nonpublic institutions should not be overlooked. These institutions

constitute the fourth sector of higher education in California. Collectively they enroll 14 percent of California's college and university students (full-time equivalent students), as compared to 16 percent for the University of California; they grant about 25 percent of the State's baccalaureate and higher degrees, as compared to the University's 27.5 percent.

The diversity of these 52 universities and colleges increases the educational options available to the young people of California. Some enroll only a few hundred students; two enroll more than 10,000. Many are church related, and espouse particular religious values. Some are open to any high school graduate; six are among the most selective institutions in the nation. Some have international research distinction; some are uninvolved with research. A few are highly specialized in the arts or other preprofessional programs. Some are quite traditional in their methods of instruction; others are highly innovative. Some set standards of educational excellence against which any public institution can judge itself; some operate pilot innovational programs that public institutions later adopt.

The nonpublic colleges and universities thus constitute a considerable public resource, and serve in ways a fourth *public* sector could not. But these colleges and universities are also in trouble. Rising costs have forced tuition increases of approximately 100 percent during the 1960's, and have reduced the number of applicants for some nonpublic colleges. Nearly all California colleges and universities, public and nonpublic, are operating on limited budgets, but some nonpublic institutions may be forced to close their doors. As an essential

partner in the State's higher education program, nonpublic institutions maintain a vast diversity of outstanding educational-resources and programs to which a specified number of additional students might be diverted to serve the interests of the student, the institutions, and the State.

6. *In order to achieve improved utilization of resources:*

- a. *All institutions of higher learning in California, public and nonpublic, should be viewed as a total resource to the people of the State and appropriate policies should be developed within that view. Specifically, the State of California should investigate, through the Coordinating Council for Higher Education, the availability of educational resources in nonpublic institutions and, by policies and means consistent with the State's interest, seek to utilize such resources to provide opportunities for students for whom public institutions have insufficient facilities or other resources.*

- b. *Efforts should be made by the State and the segments of California higher education to maximize the effective use of resources by a variety of measures developed after careful study, including the following:*

- 1) *Year-round operation on appropriate campuses of all segments, and the encouragement of the adoption of year-round operation in all levels of public education;*
 - 2) *Expansion of tuition grant programs of the State Scholarship and Loan Commission to enable more students to attend nonpublic California institutions; and*
 - 3) *State contracts, at the advice of the Coordinating Council for Higher Education, with nonpublic California institutions to provide specific high-priority graduate and professional programs for which public institutions do not have facilities or other resources.*
- c. *Economy and efficiency in serving individual student needs in contemporary higher education require diversity in educational opportunity. It is, therefore, recommended that the public segments develop and implement plans by which the total time required to complete any degree program or vocational training course be reduced in a manner consistent with maintenance of academic quality and integrity, including but not limited to improved segmental articulation, and experiment in reducing the time required for obtaining professional and other degrees by implementing the three-year baccalaureate degree program,*

early admission of exceptional high school students, and qualification by examination.

- d. Available public non-higher education and nonpublic physical facilities, such as vacated office buildings, elementary and high school plants, should be utilized in those regions where public college and university physical facilities cannot accommodate all qualified applicants.*

- e. Each public segment should make every effort to secure on an as-needed basis any instructional facilities space available in their service areas where educational programs may be offered at greater convenience to students or at lower costs. All future capital outlay requests by the public segments should carry with them justification related to total community resources and needs, not simply on-campus resources and needs.*

One of the basic purposes for the creation of the Coordinating Council for Higher Education was to improve the allocation and utilization of the State's resources by sound planning and effective coordination. It is the opinion of the Select Committee that the Donahoe Act's provision for the Council to plan for the orderly growth of higher education is very meaningful in this decade, and the Select Committee urges that the leadership and planning role of the Council be strengthened and become more prominent.

7. *In order to achieve improved planning for California higher education, the Coordinating Council for Higher Education should be the principal State agency for planning for higher education and in that role, should:*
- a. *Develop and update annually a five-year plan for California higher education;*
 - b. *Seek legislative approval for forward-year budgeting and multi-year planning for higher education;*
 - c. *Be responsible for annual and long-range enrollment and capital demand projections, which are the basis for annual budgeting and planning;*
 - d. *Assume the leadership role in identifying and developing, with the segments and State government, methods of implementing an information system and a comprehensive plan and policy for college-educated manpower needs, analysis, and supply adjustment, and utilize the O'Toole and Rosove report in determining the feasibility of methods to accomplish this objective;*
 - e. *Secure from appropriate State and national agencies reliable projections of future supply and demand for college-educated manpower and provide such*

information to the segments of higher education and secondary schools for counseling purposes; and

f. Serve as the Section 1202 State Planning Commission for Higher Education required in the federal Higher Education Amendments of 1972.

Budgeting, Allocation of Funds, and Auditing

The Select Committee has reviewed some of the broader aspects of budgeting, allocation of funds, and auditing practices that relate to public higher education in California. In this review it was recognized that the different legal bases of the three public segments and their different missions influence, and in some ways affect, these fiscal matters. The constitutional status of the University of California, the statutory standing of the California State University and Colleges, and the shared State/local district authorization and funding for the California Community Colleges present different conditions under which fiscal decisions are determined and audited. Nevertheless, there was a consensus that more consistent methods in the funding, budgeting, and auditing process are desirable for the two senior segments and, insofar as applicable, for the Community Colleges.

The system by which the State allocates funds and determines the level of support for higher education needs improvement. Because of statutory specifications that dictate minimum funding levels for many State programs other than higher education, other claims against State revenues receive, in effect, priority over State funding and State policy for higher education. As a result, there is the possibility

that higher education and some other programs become the "balancing" factors whose budgets may be largely determined by the amount of money left after most other claims have been considered. The process suggests the possibility that the State's policy objectives for higher education may be set purely as an *effect* of budget allocation rather than forming the *basis* for the allocation. Beyond this vital consideration, there is the question of whether the costly expenditure of funds and manpower required by the current budget process (a continual one) can be reduced.

The Senior Commission of the Western Association of Schools and Colleges, in response to questions from the Select Committee about the status of California higher education, reported a number of fiscal conditions, mostly applicable to the California State University and Colleges, that indicate actual or potential erosion of quality in California public higher education. These fiscal conditions include, among others: funding formulae for faculty positions that adversely affect quality and curriculum; no provision for replacement of outdated, or otherwise ineffective, instructional capital equipment; and line-item budgeting. Admittedly, the degree to which these conditions presently affect quality is controversial. Nevertheless, the Select Committee believes that there is agreement that the State's commitment to quality should be insured by careful examination of the potential effects of fiscal practices.

The Select Committee understands and appreciates the complex difficulties faced by the Legislature and the Governor in developing a multi-billion-dollar budget and the State's objectives, goals, and

priorities that undergird the annual budget. The Select Committee also understands and supports the premise that the allocation of public funds and the determination of State policy is and must remain within the political process. Nevertheless, the Select Committee believes that many improvements could be made in State budgeting for higher education.

The Select Committee recognizes the responsibility of the Executive branch and the Legislature for assuring fiscal accountability for public funds and for confirming that public expenditures are made in accordance with the purposes and procedures of State law. In carrying out this responsibility, auditing plays a prominent role. It is the view of the Select Committee that those auditing methods are most beneficial and productive that directly relate to the program, purposes, and formulae utilized in determining the initial allocation of funds. It would seem that when sum totals and overall formulae by aggregate are used to determine funding, formulae auditing of implementation should also be made in the aggregate. Auditing of component parts of the total in order to enforce inflexible application of the formulae upon each part may be counterproductive in terms of efficiency and morale, and not effective in terms of cost/benefit considerations.

It appears that it is equally unproductive for the segments' central administrations to apply inflexibly the funding formulae developed for the aggregate to sub-units of campuses of the segment. Resourceful and imaginative administration and instructional and educational diversity may be as effectively discouraged by the application of rigid formulae by central administrations as by inflexible State auditing of internal units.

8. *In order to improve the budget-making process and administrative implementation thereof, consistent with the goals of efficient utilization of resources and maintenance and improvement of educational quality, efficiency, diversity, and flexibility, it is recommended that:*
- a. *State legislative and executive authorities consider the advantages, including economies, of forward-year budgeting and multi-year planning for California higher education.*
 - b. *State executive and legislative authorities, in the exercise of their responsibility for budget control and audit, should concentrate on program budget review and approval and avoid line-item approval and direct involvement in internal budget operation and administration of the public segments of higher education.*
 - c. *The governing boards and central administrations of the public segments of higher education should develop and implement administrative means for providing to each campus the broadest flexibility of operation consistent with responsible management.*

ASSUMPTIONS AND RECOMMENDATIONS

As a result of its review of conditions forecast for the seventies, the Select Committee has developed the following assumptions, which served as a primary basis for the recommendations contained in this report.

ASSUMPTIONS

1. The State will continue to expect the three public segments of California higher education, without a major change in differentiation of function and complemented by a vigorous nonpublic segment, to be the primary delivery system for a wide diversity of higher education opportunities.
2. The demand for higher education will continue among the traditional college-age group and will increase among citizens who are not currently part of the traditional group, thus imposing a heavier enrollment burden on California higher education than at any time in its history.
3. The annual number of high school graduates will decline in the early 1980's with a resulting, slight decline in the number of undergraduate students from the traditional college-age group, mandating caution to prevent overexpansion of traditional physical

facilities in the 1970's. But there will be an offsetting demand from older adult students mandating the establishment of new delivery systems that remove the limitations of time, distance, and location on higher education opportunities.

4. The State will continue to support public higher education out of general tax revenues, but the demand for other State services will limit the funds available and there will be continued pressure to reduce institutional costs and to have the student assume a greater portion of the costs of his education.
5. The increasing costs of college attendance to the student and his family will require a continuing increase in student financial aid and tuition scholarship programs from the State and federal governments.
6. The needs of the State's economically disadvantaged and culturally distinct citizens will continue to require special educational and financial support and sustained efforts to achieve more participation by members of minority groups.
7. A dynamic society will continue to cause temporary imbalances between supply of and demand for college-educated manpower in particular disciplines; technological and professional advances will continue at an accelerated pace, creating a critical demand for formal educational programs to update the skills of California's adult population.

8. The State will continue to demand increased efficiency in the use of resources and to require improved accountability, thus imposing a necessity for improved planning and management systems in public higher education.
9. The nonpublic institutions will continue to face severe income/expenditure gaps and will require increasing amounts of State funds if they are to continue their essential role in California higher education. This will impose a need for more effective organization of the nonpublic institutions and an improved accountability relationship to the State and its planning.
10. The State will demand that the Coordinating Council for Higher Education become more active in long-range planning and more effective in coordinating program review and development among the three public segments within the context of their differentiated missions.
11. The mobility, educational level, and the personal income of the general population will continue to rise, and the shorter work week will become increasingly widespread. These developments will create additional demands on higher education for flexible and transferable educational opportunities that improve the quality of life and the development of the individual.
12. The public's confidence in higher education will depend in part on the willingness of institutions to be more responsive and flexible in meeting the needs of California's citizens and in the institutions' effectiveness and efficiency.

13. The State will continue to encourage each public segment of higher education to achieve excellence in its programs but will also insist on effective coordination to meet the needs of California's citizens without unnecessary duplication.

RECOMMENDATIONS

In the listing that follows, the page or pages in the report on which each recommendation appears is shown in parentheses following the recommendation.

Structure, Governance, Coordination, and Planning

1. The basic structure for California higher education as provided in the 1960 Master Plan has served California well and should be retained. (P.3)
2. It is recommended that the terms of office for members of the governing boards of California public higher education should be set at twelve years, that no member be eligible for reappointment after serving a full term, and that retirement be mandatory at 70 years of age.

(P. 5)
3. The Coordinating Council for Higher Education should be renamed the *California Commission for Higher Education*, to reflect an emphasis upon its expanded planning function, and should be composed of 21 members, including the following: (pp. 6-8)

- a. The Chairman of the Board of Regents of the University of California, or his alternate from among and with the approval of the Board of Regents, and the chief executive of the University.
- b. The Chairman of the Board of Trustees of the California State University and Colleges, or his alternate from among and with the approval of the Board of Trustees, and the chief executive of the State University and Colleges.
- c. The Chairman of the Board of Governors of the California Community Colleges, or his alternate from among and with the approval of the Board of Governors, and the chief executive of the Community Colleges.
- d. A president of a nonpublic institution and an alternate, appointed by the Governor, with the consent of the Senate, from a list of nominees proposed by nonpublic institutions; for a term of six years.
- e. The Chairman of the State Board of Education or his alternate from among and with the approval of other members of the Board.
- f. The Chairman of the California Advisory Council on Vocational Education and Technical Training (or a comparable agency) or his alternate from among and

with the approval of other members of the Council.

- g. A member from a proprietary institution and an alternate, appointed by the Governor, with the consent of the Senate, from a list of nominees provided by proprietary institutions; for a term of six years.
 - h. Eleven members from the general public, appointed by the Governor with the consent of the Senate; for terms of six years.
4. The Coordinating Council for Higher Education should be adequately financed and its professional staff should be either exempt from Civil Service or appropriately salaried to be competitively compensated so that these positions will attract professionals of the highest competence in administration and in educational policy and planning. (p. 11)
5. The Coordinating Council for Higher Education should consider the improvement of intersegmental liaison by the assignment, by each segment, of a dean's level position to the staff of the Coordinating Council to be carried by the respective segment's budget and approved by the Director of the Council. In addition to serving a liaison function, such personnel would serve as Scholars-in-Residence for the Council, responsible for project assignments planned in advance by the Director

of the Council and the chief executive of the segment.
(p. 11)

6. The Master Plan and the Donahoe Higher Education Act
should be amended to state: (pp. 13-14)

a. The Coordinating Council for Higher Education is the
official State agency for the regular and periodic
review, interpretation, application, modification,
and declaration of the State's Master Plan for Higher
Education, and shall make such recommendations to the
Legislature for statutory changes it deems necessary
and appropriate to carrying out its functions.

b. The Coordinating Council for Higher Education shall
have the authority to develop criteria that shall be
used by the segments in the planning of new programs
or in the continuing support of ongoing programs
where substantial expense or critical cost/benefit
ratios are involved.

c. The Coordinating Council for Higher Education shall
have authority to review and advise with respect to
the need for ongoing programs and shall review and
express its approval or disapproval of new programs,
including external and extended degree programs, and
excluding core and experimental programs mutually
agreed upon by the Council and the respective

segments. (It is intended that the segments shall seek the advice of the Council with respect to a new program before taking any action to implement it.)

d. The Coordinating Council for Higher Education is designated as the State planning agency for post-secondary education for the purpose of federal legislation and federal programs.

7. In connection with the responsibilities of the Coordinating Council for Higher Education recommended in the report of the Select Committee and specified in the Donahoe Higher Education Act, the Select Committee recommends that the Council, after reviewing the Committee's recommendations, prepare a revised and updated Master Plan document. (p. 14)

8. The Coordinating Council for Higher Education and its staff should review the various alternative-policy papers being prepared for the Legislature's Joint Committee on the Master Plan and consider appropriate responses that pertain to the subjects and recommendations made throughout the report of the Select Committee on the Master Plan. (pp. 14-15)

9. In the realization that the Select Committee has recommended in its report a number of added responsibilities for the Coordinating Council for Higher Education, aid

that these additional duties cannot be performed under the present staff limitations, the Select Committee recommends the augmentation of personnel sufficient to implement the recommendations proposed by the Select Committee and adopted by the Coordinating Council and Legislature. (p. 15)

10. The Donahoe Higher Education Act should be amended to charge the Coordinating Council for Higher Education with monitoring and reviewing the application of Chapter 1.6 and advising the Legislature accordingly. (p. 16)
11. The Coordinating Council for Higher Education should develop and periodically review guidelines for the delineation of responsibility for adult and continuing higher education. The initial review by the Council should develop basic guidelines consistent with the new conditions of the seventies and the delineation of function specified in the Donahoe Higher Education Act. (p. 17)
12. The Coordinating Council for Higher Education, in consultation and cooperation with the California Community Colleges, the California State University and Colleges, the University of California, and nonpublic institutions, should coordinate extended degree programs to avoid unnecessary duplication and wasteful competition. Coordination in geographic regions by intersegmental

committees or consortia may be advisable in those areas where differentiated functions require programs by more than one segment in the same locality. (pp. 17-18)

13. The Coordinating Council for Higher Education should request that the Board of Trustees of the California State University and Colleges and the Board of Regents of the University of California, in consultation and cooperation with the Council, consider the need and desirability for study of alternate proposals to create or modify local advisory boards for each of their respective campuses.

(p. 19)

14. The senior segments of California public higher education should develop missions for their several campuses with more specificity and delineation than "general campus" or "statewide programs" and, apart from specific program review, seek the advice of the Coordinating Council for Higher Education concerning such delineation. (p. 20)

15. The Coordinating Council for Higher Education should undertake an evaluation of the desirability and need for the following: (pp. 20-21)

- a. regional California Community College districts with governing jurisdiction; and
- b. developing with the public senior segments, plans for any new campus in either system as an upper-level and

graduate institution, or for converting an appropriate number of campuses in each segment into upper-level and graduate institutions.

16. The Board of Governors of the California Community Colleges should develop regional academic and facilities plans and seek the advice of the Coordinating Council for Higher Education concerning such plans. (P. 21)
17. The State should encourage the establishment of regional higher education consortia, and the Coordinating Council for Higher Education is urged to fulfill its advisory role as catalyst, information clearinghouse, and assistant in the development of new and existing consortia. (pp. 22-23)
 - a. Such consortia should have an intersegmental board to develop policy proposals for the respective boards and to coordinate and administer segmental policies for cross-registration of students, for continuing higher education programs, and for facilities utilization (including public libraries and facilities of private businesses and other organizations).
 - b. The consortia should also establish a multi-media division to develop, through maximum utilization of current capability of the segments if possible, production of academic instructional films and tapes; to develop contracts and procedures for utilizing

educational and commercial multi-media facilities in the instructional process; and to coordinate the offering of televised and correspondence instruction for appropriate academic credit by member institutions.

c. The consortia should also organize testing and evaluation centers for administering challenge examinations for credit, arrange for independent study and internship experience, develop cooperative and "on-the-job" programs and other educational experiences, and organize on-site instruction in business facilities in the region. In general, the consortia should place high priority on developing, and utilizing community resources.

18. The Select Committee recommends that the advisory responsibilities of the Coordinating Council for Higher Education as specified in the Donahoe Higher Education Act, be made applicable to the State Scholarship and Loan Commission, and that the Council and the State Scholarship and Loan Commission establish a comparable, complementary, and cooperative relationship in policy development to achieve improved planning. (p.25)

19. A joint committee of the State Board of Education and the Coordinating Council for Higher Education should be formed to explore and develop feasible and productive methods of articulation with the secondary schools and

advise the segments of public higher education accordingly.

(p. 26)

Admissions and Other Aspects of Educational Policy

1. It is recommended that the California Master Plan for Higher Education include the provisions below: (pp. 32-35)
 - a. Admission requirements for first-time freshmen shall be appropriate to the delineated functions of each of the three public segments of California higher education. Requirements for the two senior segments shall be determined on the basis of high school achievement and/or other traditional and nontraditional criteria that reasonably predict success for the student; and the facilities and instructional support available and projected.

While it is the Select Committee's opinion that the present admission requirements utilized by the segments, subject to the large scale experimentation recommended, should be retained for 1973-74, it is recommended that the Master Plan provide for the Coordinating Council for Higher Education, in consultation with the segments, to review periodically the admission pools of each segment, and the admission requirements used to identify the qualified student, and to advise and recommend to the segments and State

government any needed modifications, taking into consideration the progress reports on experimentation. The first review should be completed by June 30, 1974, for implementation in the 1975-76 academic year.

- b. Both senior segments of California public higher education shall conduct controlled experimentation in admissions by modifying criteria and previous achievement required and report the results to the Coordinating Council for Higher Education.
- c. Each senior segment of California public higher education shall expand the percentages of admissions in exception to the published requirements to the degree that such expansion is educationally sound and is supported by appropriate programs and services, Priority for exceptions shall be given to the disadvantaged, veterans, and applicants with unique skills and abilities.
- d. Biennially, all public segments of California higher education shall report to the Coordinating Council for Higher Education concerning admissions requirements and definitions, as well as the criteria used for exceptions and numbers of exceptions granted during the previous biennium. The first such report should be submitted by July 1, 1974.

2. The Select Committee recommends that California's new Master Plan should provide the following: (pp. 36-39)
 - a. All transfer students who have completed a minimum of 56-60 (as determined by the segments) transferable semester credits with a grade-point average equal to that required by the two senior segments of their continuing students shall be given all enrollment and program opportunities available to continuing students on a basis equal to those of continuing students.
 - b. Transfer students who were eligible for admission as freshmen to the senior segments of public higher education and who have maintained satisfactory academic standing shall be admitted at any level under policies determined by the segments.
 - c. Each campus within the two senior segments of public higher education should implement measures to require that registration or pre-registration systems be designed to assure transfer students and other newly-admitted students equal opportunity to enroll in required and major courses.
 - d. The Coordinating Council for Higher Education shall assume full responsibility for coordinating articulation processes among the public segments of California higher education.

- e. Each public senior segment of California higher education shall determine the appropriate mix of lower division/upper division students, but such mix shall provide adequate spaces for all eligible transfer students from the California Community Colleges and shall not provide less than 30 nor more than 40 percent of total undergraduates in lower division.

- 3a. The Department of Finance or State statutes shall delegate to the Coordinating Council for Higher Education the function of making enrollment projections, in consultation with segmental representatives, and such projections should serve as the principal basis for planning, policy, and support for higher education. (p. 44)

- 3b. If segmental enrollment limitations by the State become necessary in the future, undergraduate and graduate quotas in totals should be preferred over enrollment quotas by field of study, leaving the latter to be determined by the public segments of higher education. according to the resources available. (p. 44)

- 4. Each of the three public segments of California higher education should develop guidelines for campus size according to educational and economic effectiveness, and on the basis of these guidelines determine the maximum size for each campus. This information should be reported to the Coordinating Council for Higher Education no later

than July 1973 for its review and transmittal to appropriate executive and legislative agencies. (p.47)

5. The public segments of California higher education should develop programs in appropriate degree fields that provide students the option of completing a baccalaureate degree in less than four academic years of normal course work (the normal period for such programs would be reduced to three years). The segments are also urged to utilize or expand the use of advanced placement examinations and challenge examinations, such as those provided in the College Level Examination Program, for credit and to make it possible for students to avoid unnecessary duplication in subjects in which they have demonstrated competence. (p. 51)
6. Occupational curricula in the California Community Colleges should include options for program completion at an accelerated pace. (p. 51)
7. Each public segment of California higher education should provide work or educational "leaves of absence" without penalty to students in good standing; develop preferential systems of re-entry for such students over first-time applicants; and give serious consideration to a system of deferred admissions based on a work or educational plan submitted by the student, with the assurance of admission upon completion of the approved plan. (pp. 51-52)

8. All public segments of California higher education should expand organizational approaches that permit student participation in small learning units, such as seminars; in self-paced instructional programs allowing for individualized rates of progress, thereby encouraging the exceptional student to complete his studies in a shorter time; and in "cluster" or "theme" colleges. (p. 52)
9. Academic departments and administration of all campuses within California public higher education should consider, where feasible, integrating formal classroom instruction with some form of outside work experience. Both senior segments should devise programs in appropriate fields whereby consideration is given to "on-the-job" internships in conjunction with weekend seminars for certain master's and other degree work, both in external degrees and in regular programs. The Legislature should continue to expand effective ways of encouraging State and local governments to institute public service internship programs in concert with institutions of higher education. (p. 52)
10. All California resident students within the same public segment of higher education, except Extension students not in external degree programs, regardless of age, full-time or part-time status, should be treated equally in State funding and the assessment of fees in proportion

to the course work taken and should have equal access to support services, excluding health services. (p. 53)

11. Each public segment of California higher education should strive to increase substantially the availability of weekend and evening programs of instruction and should examine carefully its service and relationship to the immediate community (including nonpublic institutions) in providing educational opportunities. (p. 56)

12. Governmental units, private business and industry, public institutions, and the segments of California higher education are urged to adopt policies and effect cooperative arrangements for continuing higher education opportunities on-site and on-campus. These cooperative arrangements should be extended to include the sharing and exchange of information, facilities, equipment, personnel, and other resources. Colleges and universities are commended for utilizing professional expertise outside their faculties and are urged to expand the use of adjunct professors from business, government agencies, the arts, and professions. (p. 57)

13. The State should support a feasibility study through the Coordinating Council for Higher Education to determine the relative effectiveness of the following two and other alternatives for funding multi-media and nontraditional approaches to instruction. (pp. 59-60)

- a. funding through each public segment of California higher education the utilization of electronic and other mass communications media in instruction; and
- b. funding the implementation of new instructional approaches that emphasize the use of electronic and other mass communications media through a statewide grants committee consisting of representatives of California higher education, instructional technologists, and television officials.

14. The segments of California public higher education should take immediate steps to determine the cost/benefit relationships of the application of new policies and resources, electronic and otherwise, in education, and to improve the quality of instruction by such action. Such steps should include, among others: (p. 60)

- a. implementing organized means for employing electronic media throughout the instructional process, with a particular emphasis on providing access for off-campus students;
- b. adopting policies that permit students to enroll at more than one institution simultaneously without prejudice; and
- c. developing policies concerning the rights and responsibilities for the development of new instructional

materials (e.g., televised courses, programmed-
learning materials) and for the interchange of these
materials among the segments of higher education.

15. The public segments of California higher education should expand the utilization of multi-media and televised instruction in their external and extended degree programs, which would, where possible and appropriate, make use of on-campus televised instruction to serve both campus and noncampus students. (pp. 60-61)
16. The public segments of California higher education should report to the Coordinating Council for Higher Education regarding steps being taken to implement a system of fiscal or other incentives to encourage and reward teachers for innovational and nontraditional instruction that permits productive gains in terms of unit costs without sacrifice of quality of instruction. The Council should review such information and advise State government on the feasibility of funding incentive programs. (P. 61)
17. The California State Board of Education should actively encourage the State and local school districts to appropriate sufficient funding for an effective academic and career counseling program. (p. 62)

18. The segments of California public higher education should review their counseling programs and develop means of improving their content and availability; in particular, they should develop means by which the time contributed by regular faculty to academic and career counseling is counted as part of the assigned work load. It is further recommended that programs be expanded where needed to enable designated faculty members to become thoroughly prepared to perform the counseling function and that State funding recognize this essential activity by providing sufficient budgetary support. (pp. 62-63)
19. Central administrations, governing boards, faculty governance systems, and State government should make every effort in the allocation of funds to provide for and encourage the development of flexible local program budgets for each campus. These would provide the flexibility to develop and utilize a variety of patterns of instruction and academic programming and grant the campus authority to utilize funds within assigned limits, subject to strict accountability. (p. 64)
20. The administrations and the faculties of each segment of California public higher education should devise faculty work-load and reward policies that recognize and encourage new or improved methodology and innovations in teaching and counseling. State budget offices should recognize

these varied functions in their analyses and should support the allocation of essential funds for research in and development of innovations in teaching and counseling. (p. 64)

21. The Coordinating Council for Higher Education, in consultation with the State Scholarship and Loan Commission, shall investigate the feasibility of creating a scholarship program that allocates to each high school in California a number of scholarships in proportion to its enrollment of economically disadvantaged students. (p. 65)
22. The Legislature should fund tuition waivers for each segment of California public higher education, and the governing boards of each segment should authorize a substantial number of tuition waivers for highly qualified nonresident American and foreign undergraduate students, and even more importantly, for nonresident American and foreign graduate students in the senior segments. (pp. 66-67)
23. The University of California should continue to be the only segment of public higher education with the authority to award the doctorate unilaterally, but with the proviso that doctoral programs, including joint doctorates, be made more flexible to provide improved preparation of candidates for college teaching.

The University should report its progress in making the doctorate more flexible to the Coordinating Council for Higher Education by July 1, 1976, at which time the question of the authority to award the doctorate should be reviewed. (pp. 68-69)

24. The current provision for the awarding of a doctorate jointly by the University of California and the California State University and Colleges, and jointly by the latter and nonpublic institutions, should be continued.

(p.69)

25. The Coordinating Council for Higher Education, in consultation with the two senior public segments of California higher education, should conduct a feasibility study or pilot program to develop jointly articulated programs in the health sciences and medicine.

(p. 69)

26. Faculty salaries and benefits in California public higher education must be competitive with those provided in comparable institutions. They should not be allowed to lag or, as between the segments, to become disproportionate for comparable educational function and faculty obligations. (p. 71)

27. The Legislature should establish a system of advance authorization with respect to budgeting faculty and staff Positions for the senior segments of California

public higher education in order to make possible greater stability in planning and operations in higher education. (p. 72)

28. Salary adjustments for faculty in the two senior segments of California public higher education should be determined for the next fiscal year by State government sufficiently early in the spring so that they may favorably affect recruitment and retention of faculty. (p. 72)
29. The tenure concept as it may apply to all or any of the public segments of California higher education should be reviewed after certain national studies, scheduled for completion this year, are released. Whatever procedure for faculty employment, retention, and promotion is ultimately adopted, provision should be made for differential pay or other recognition for meritorious performance. Probationary periods for faculty prior to tenure in all public segments should more closely approximate the seven-year maximum probation period utilized by the University of California. (pp. 73-74)
30. Efforts shall be increased to recruit a greater number of qualified women and minority faculty for vacancies in all public segments of California higher education to achieve significantly greater participation during

the next decade. To accomplish this objective, efforts should be made to encourage the preparation of women and minority students for college and university teaching and administration. (p. 74)

31. Research should be an integral function of all segments of California higher education. However, State-funded research programs for public institutions should be in accordance with the delineation of functions among the segments as provided in the Donahoe Higher Education Act. (pp. 77-78)
 - a. Research related to the teaching function should be financed by the State in each of the three public segments; for the California Community Colleges, the State shall pay its appropriate share. Each of the segments should seek federal and foundation funds to finance research related to the teaching function.
 - b. Applied research is appropriate to the three public segments and should be funded from whatever sources are available.
 - c. State-funded "pure research," not necessarily related to the improvement of instruction or to applied research, should remain in the province of the University of California, which should

continue to be the principal State-supported academic research agency.

- d. Research and development in the improvement and innovation of teaching belongs to all three public segments, with emphasis in the California State University and Colleges in view of the fact that they are engaged so extensively in teacher training.

Finance and the Utilization of Resources

1. It is recommended that the present method of funding California public higher education predominately through institutions be retained as the primary method of State financing of higher education, and that this method be accompanied by a more clearly defined tuition policy and a substantial, extended student financial aid program. (p. 83)
- 2a. The Legislature and the Governor should clarify public policy by legislation or constitutional amendment concerning student tuition and other charges in California public higher education. (p. 86)
- 2b. The California Community Colleges, to which all high school graduates are qualified for admission, should continue to remain tuition free. In this connection, it is also recommended that the existing limitation of

State funding for Community College students over 21 years of age be removed and that all students, regardless of age, part-time and full-time, following graded programs on any day or night of the week, be funded on an equal basis and that a system of financing should be developed that takes into account local resources for funding quality programs; and the State's share of Community College financing should be increased to 50 percent at the earliest possible date. (pp. 86-87)

- 2c. Resident students with the ability to pay should share in the direct costs of their instruction at both the University of California and the California State University and Colleges. It is recommended that such charges be set at the lowest practicable level but should not in any case exceed the median of like charges at comparable public institutions in other states (those public institutions used for faculty salary comparisons). (p 87)
- 2d. The State should provide the necessary instructional physical facilities for the University of California and the California State University and Colleges. (p. 87)
- 2e. The State should avoid utilizing funds derived from tuition and other student charges for financing the construction of physical facilities for instructional purposes. (p. 87)

3. The Select Committee urges the attainment of the goal of equal access to California higher education in the current decade to assure that no qualified and equally motivated resident shall be denied the opportunity of higher education because of financial need. Financial assistance from the segments, governmental agencies, and all other available sources, should be provided to those in need through appropriate combinations of scholarships and tuition grants, work-study, loans, other special purpose grants, and through a substantial expansion of the College Opportunity Grants Program. (p. 89)
4. External and extended degree programs offered by the public segments of California higher education should be funded by the State and the student in the same proportion of costs as regular degree programs. (p. 90)
5. University Extension and the California State University and Colleges Extension should be provided State funding for administrative capability to respond to public needs. All other State funds should be provided upon advance program approval by the Legislature. (p. 91)
6. In order to achieve improved utilization of resources:
(pp. 96-98)
 - a. All institutions of higher learning in California, public and nonpublic, should be viewed as a total

resource to the people of the State and appropriate policies should be developed within that view. Specifically, the State of California should investigate, through the Coordinating Council for Higher Education, the availability of educational resources in nonpublic institutions and, by policies and means consistent with the State's interest, seek to utilize such resources to provide opportunities for students for whom public institutions have insufficient facilities or other resources.

- b. Efforts should be made by the State and the segments of California higher education to maximize the effective use of resources by a variety of measures developed after careful study, including the following:
 - 1) Year-round operation on appropriate campuses of all segments, and the encouragement of the adoption of year-round operation in all levels of public education;
 - 2) Expansion of tuition grant programs of the State Scholarship and Loan Commission to enable more students to attend nonpublic California institutions; and
 - 3) State contracts, at the advice of the Coordinating Council for Higher Education, with nonpublic California institutions to provide

specific high-priority graduate and professional programs for which public institutions do not have facilities or other resources.

- c. Economy and efficiency in serving individual student needs in contemporary higher education require diversity in educational opportunity, It is, therefore, recommended that the public segments develop and implement plans by which the total time required to complete any degree program or vocational training course be reduced in a manner consistent with maintenance of academic quality and integrity, including but not limited to improved segmental articulation, and experiment in reducing the time required for obtaining professional and other degrees by implementing the three-year baccalaureate degree program, early admission of exceptional high school students, and qualification by examination.
- d. Available public non-higher education and nonpublic physical facilities, such as vacated office buildings, elementary and high school plants, should be utilized in those regions where public college and university physical facilities cannot accommodate all qualified applicants.
- e. Each public segment should make every effort to secure on an as-needed basis any instructional

facilities space available in their service areas where educational programs may be offered at greater convenience to students or at lower costs. All future capital outlay requests by the public segments should carry with them justification related to total community resources and needs, not simply on-campus resources and needs.

7. In order to achieve improved planning for California higher education, the Coordinating Council for Higher Education should be the principal State agency for planning for higher education and in that role, should: (pp. 99-100)
 - a. Develop and update annually a five-year plan for California higher education;
 - b. Seek legislative approval for forward-year budgeting and multi-year planning for higher education;
 - c. Be responsible for annual and long-range enrollment and capital demand projections, which are the basis for annual budgeting and planning;
 - d. Assume the leadership role in identifying and developing, with the segments and State government, methods of implementing an information system and a comprehensive plan and policy for college-educated manpower needs, analysis, and supply adjustment, and utilize the O'Toole and Rosove report in determining

the feasibility of methods to accomplish this objective;

- e. Secure from appropriate State and national agencies reliable projections of future supply and demand for college-educated manpower and provide such information to the segments of higher education and secondary schools for counseling purposes; and
 - f. Serve as the Section 1202 State Planning Commission for Higher Education required in the federal Higher Education Amendments of 1972.
8. In order to improve the budget-making process and administrative implementation thereof, consistent with the goals of efficient utilization of resources and maintenance and improvement of educational quality, efficiency, diversity, and flexibility, it is recommended that: (p. 103)
- a. State legislative and executive authorities consider the advantages, including economies, of forward-year budgeting and multi-year planning for California higher education.
 - b. State executive and legislative authorities, in the exercise of their responsibility for budget control and audit, should concentrate on program budget review and approval and avoid line-item approval and direct involvement in internal budget operation

and administration of the public segments of higher education.

- c. The governing boards and central administrations of the public segments of higher education should develop and implement administrative means for providing to each campus the broadest flexibility of operation consistent with responsible management.

SELECT COMMITTEE RESPONSE
TO
ASSEMBLY CONCURRENT RESOLUTION 166

Assembly Concurrent Resolution 166 directed the Select Committee to respond to the following questions in its review of the Master Plan:

1. *Should standards be set for the size of campuses in terms of the minimum, optimum and maximum number of students that will permit both efficiency and quality education, and if so, what should those standards be?*

A consultant's study that will be distributed to the Legislature indicates that standards should be set for the size of campuses in terms of the minimum and maximum ranges of numbers of students that will permit both efficiency and quality education. The Select Committee includes in its report recommendations that such standards be set for each campus after careful consideration of a number of factors, and that such standards be reviewed periodically in relation to the conditions that determine efficiency, quality education, and effects upon the immediate community.

2. *Should traditional campuses continue to be the primary higher education delivery system in California or should other approaches be initiated?*

The Select Committee recommends that the traditional campus should be the primary method of delivery for higher education in California; however, it recommends that there should be pilot alternative or complementary systems developed and implemented promptly in order to widen opportunity and diversity and to give greater support to the concept of lifelong learning.

3. Should the role of the community colleges be expanded to include three-year terminal programs in vocational and technical fields?

The Select Committee was unable to secure sufficient information regarding terminal and technical vocational programs to respond to this query. The California Community Colleges in some cases presently offer a few three-year technical programs that the Coordinating Council for Higher Education has advised are appropriate when consistent with program requirements and accrediting regulations. It is suggested that the Coordinating Council engage in a policy study concerning the full range of vocational and technical postsecondary education in California so that it may advise the Legislature on this urgent but complex subject. Perhaps it is an appropriate task for a Technical and Vocational Advisory Committee as provided for in Section 1055 of the federal Higher Education Amendments of 1972.

4. What will be the future demands and needs for graduate and professional education at all levels?

In attempting to respond to the need for information and forecasts for graduate and professional education needs at all levels, the

Select Committee commissioned a study of the system by which forecasts of needs and supply are made in California. That study was distributed to legislators and other officials of State government in September 1972 and specific recommendations regarding the study and this topic are contained within this report. Other recommendations ask the Coordinating Council to become more involved in providing advice on this subject periodically.

5. Should a permanent mechanism be established to review, on an ongoing basis, the existing and proposed academic plans and program of the institutions of higher education so as to reduce course and program proliferation and the costs associated therewith and, if so, should this be accomplished?

The Select Committee recommends that the Coordinating Council for Higher Education should serve as the mechanism described above and that regular review of academic programs, with guidelines adopted by the Council, should be performed by that agency.