On January 27, 1971, Chancellor Dumke of the California State College system presented proposals for a new approach to higher education to the Board of Trustees. This paper explains these new approaches, the first of which is to offer degrees based on academic achievement as measured and evaluated by competent faculties, rather than on the basis of accumulation of credits, hours, semesters, and classes attended. This could be done by establishing advanced placement working relationships with the high schools and through comprehensive examinations given lower division students. The general education breadth requirements in the liberal arts should be redefined in terms of basic bodies of knowledge, appreciations, and skills, instead of units and elective courses. Comprehensive examinations should also be established in major fields offered in the upper division. The 2nd proposal suggests: (1) putting an absolute ceiling on the requirements for the degree and for majors; (2) expanding the use of late afternoon and evening classrooms and laboratories, and the Saturday use of these facilities; and (3) analyzing cost data to determine whether costs of some programs can be reduced without loss of quality, and whether some programs should be discontinued. A September 1971 report on the status of some projects initiated on the basis of these proposals is included. (AF)
A NEW APPROACH TO HIGHER EDUCATION

. . . FOR THE CALIFORNIA STATE COLLEGES*

by

Glenn S. Dumke, Chancellor
The California State Colleges

January, 1971

I believe that the time for fundamental changes in the character of, and in our approach to, higher education has come. Students and faculties and public alike have been questioning the educational results of our current systems, and many of us have serious doubts about their continuing efficacy. In addition, the increasing numbers of persons who want to be educated, and the increasing pressures upon the tax dollar, both in California and throughout the nation, make it very clear that under existing systems, we will either have to limit our service, or thin out our operational quality, neither of them very acceptable as alternatives. The necessary changes will not be brought about by the inflexible, tradition-ridden, Ivy-League-type universities, but rather by institutions like ours, young enough to be flexible, historically teaching-oriented, and not afraid to try something new. We have an opportunity to be the bellwether for the nation in changes, certain of which are inevitable. In proposing these changes I am guided by the triple goals of expanding educational opportunity for the thousands of students who are knocking at our doors; the maintenance and improvement of academic quality which we have struggled for over the last ten years and have achieved in large measure; and greater value received by both students and taxpayers - goals which we clearly cannot hope to achieve under our current fiscal constraints and our present rigid systems.

While it is incumbent on me to continue to present the current State College case, and that of thousands of prospective students, and to urge adequate financing of the Colleges under our present formulas - and this I will do with all of the energy at my command - it is equally incumbent that we seek, by all means which do not undermine educational quality, to serve a larger number of students with the resources made available. It is also incumbent on us from time to time to look at our end product, the educated graduate, and to ask ourselves if we are doing the best possible job for him.

In line with these convictions, I am making several proposals which I have presented to the Trustees. I have also discussed them with the Presidents, and have their general support, and I have informed the Chairman of the Academic Senate, the intent being to secure reactions from the Senate as a body.

*On January 27, 1971, Chancellor Dumke presented his proposals for a new approach to higher education for The California State Colleges to the Committee on Educational Policy of the Board of Trustees. At that time he indicated he would appoint special Task Forces to pursue the goals outlined in this proposal.

Two Task Forces were appointed by Chancellor Dumke on February 12 and are now functioning. These Task Forces are being supplemented by working groups on the nineteen State College campuses as well as by systemwide sub-committees.
My first major proposal will be considered by some as revolutionary in nature, and is fundamental to all the others. Its objective is better education, education more appropriate to our times. As an added dividend, I believe it will also prove more economical, both in dollars and time. I propose that we challenge the lockstep, time-serving practice of offering a degree based on the accumulation of credits, hours, semesters, and classes attended. I propose that we offer, instead, degrees based on academic achievement, carefully measured and evaluated by competent faculties.

Many of our freshmen now come to college with a far better preparation in general education than they did ten or twenty years ago. Since Sputnik, the elementary and high schools have greatly strengthened their programs, particularly in the sciences and mathematics. Some attempts have been made to recognize this work by advanced placement in college. Such efforts have, thus far, had only minor quantitative impact. I believe that the period of time spent in college can be reduced by one-half to one full year or more for many, if not for most, students, by a deliberately strengthened advanced placement working relationship with the high schools and through comprehensive examinations given lower division students. Through such programs credit could be given for much of our required general education. Those students who can satisfactorily demonstrate their knowledge and understanding should be moved ahead to a point where they can be challenged by new knowledge and skills.

We will explore ways of granting some high school seniors and community college transfers a guarantee of future admission; this to permit them to explore the work-world for a year or two before entering college. This would break the lockstep of the educational path and would eliminate the wall between the work-world and the campus. Education should cease being rigidly compressed into the early years. We should offer educational opportunity for all ages—the young, mature and old. Under these conditions, the “over 30” barrier would disappear.

This leads us to the question: What should a college degree signify? Higher education has almost uniformly defined requirements for the degree in quantitative terms—about 124 and 132 semester units, comprising some two thousand 50-minute periods in a variety of courses. The student’s knowledge, abilities, appreciation, comprehension, and overall achievements are recognized for degree-granting purposes only in bits and pieces—credits, units, grades, etc., signifying the completion of the required work of given courses.

I believe we should take a broader perspective which emphasizes an achievement-based concept, and which holds constantly before the student the necessity to integrate and interrelate his own learning experiences. We have, however, permitted the systems, the academic bureaucracy, and the politics of higher education and the State agencies, to which higher education is so closely related, to obscure these basic learning objectives, and to bewilder us with so many trees, we have lost our view of the forest. Our bachelor’s degree should represent a dual approach—both learning in breadth—which includes the development of the perspectives, the problem-solving skills, the communications competence, and the appreciations of the liberal arts—and in depth, which stresses high competence in a specific major area. Such a combination of breadth and specialization, as clearly shown by existing research, enables a person to live a better life and to adapt intelligently to changing conditions, as well as to make a living in today’s world. We are stressing human development as well as occupational competence.
I propose that the faculties be called upon to identify the skills, knowledge, appreciations, and understandings which they seek for students and that existing or new means of comprehensive evaluation be employed to test college levels of achievement.

All of our colleges currently provide students with limited opportunities to take challenge examinations. This is a device whereby a student, if he believes he has the competence to pass a course examination, or can acquire it by individual study, may take an examination for course credit without enrolling for the term. A more aggressive and flexible use of this device should be encouraged and incentives provided to faculty and students to use the challenge examination. One way that this can be encouraged is to develop a new means to change our existing methods of providing workload credit for faculty, and I propose that this be done without delay. Extended use of the challenge examination would reduce demand for classroom space and would, at the same time, markedly accelerate progress toward the degree for able students.

The effective use of advanced placement, comprehensive entrance examinations, and challenge examinations might reduce the minimum time spent in the undergraduate work to 2-1/2 to 3-1/2 years. An average reduction of from only 4 to 3-1/2 years between freshman admission and graduation would be equivalent to serving at least 12,500 more students with only modest additional resources directed to increased record keeping, advising, and the handling of examinations.

What I propose is something far more fundamental in character, however, than mere extension of current practices. The general education breadth requirements in the Liberal Arts which comprise a large portion of the lower division curriculum should be redefined in terms of basic bodies of knowledge, appreciations and skills, instead of the present definition solely in terms of units and elective courses. The requirements thus redefined might be subdivided into suitable large component parts, each of which would be open to a challenge examination. One possibility would be to have general education divided into four areas — social science, humanities, science and mathematics, and communications skills, each with a suitable challenge examination available. If a student can demonstrate that he can write well, there is no need for him to sit through a course in elementary composition. If a student learned basic American history in high school, there should be no requirement which says he must repeat that experience as a freshman. There currently exist recognized examinations used nationally in the areas of general education breadth requirements. Since the State Colleges accept transfer, units, sight unseen, we should be willing to accept national test scores, particularly if we give the examinations.

With regard to upper division specialization, comprehensive examinations should also be established in all major fields of knowledge which the colleges offer. The objective should be that a student need not complete a certain number of units to meet degree requirements but could instead secure a degree based on a proven achievement level at any time that he feels competent, with the help of faculty advisement, to subject himself to such an examination. A student should be allowed to take such a comprehensive examination at any time he wishes and on this basis qualify for fulfillment of his major requirements. Much work would need to be done by the faculty in developing broad, demanding, thorough and perceptive examinations which might be in part oral, and which might include projects as appropriate. In some fields the Graduate Record Examinations could be used.
Such fundamental changes as I here propose would change in many ways the task and function of the college faculty. The individual faculty member would serve more in the capacity of adviser and resource consultant for students, and evaluator of student achievement. Proportionately less of his time would be spent in classroom lecture or laboratory supervision because over a period of time the number of class offerings would be reduced proportionately. This is why we must devise a new method of measuring faculty workload. The 12-hours-in-class rule would be outuated.

In like manner, much greater responsibility would be placed on the student for his own learning, which could be largely or entirely independent study. Classes would be available, as in the past, for those students who feel this need, but the total campus would become a resource for learning, with people, books, electronic gadgets, and advisement available for those who wish to learn, but with much more initiative demanded of the student himself. The penalty for lack of such initiative would be swift. Spoon feeding would be at an end. As space becomes more and more difficult to provide, a larger number of students might be forced to independent work or to rethink their educational objectives.

Related to this proposal is the possibility of providing degree opportunities for substantial numbers of students other than through an on-campus program as students in-residence—students who, under our present rigid systems, we cannot hope to serve. Our extension operations should provide a degree aspirant with an alternative to the on-campus program. The new British "Open University" has within it a number of concepts which, with modifications, might well work in the State College context. The application of modern technology to higher education—televised instruction, correspondence courses, self-study combined with intensive short-course on-campus programs, taped lectures with study guides to comprise programmed learning, as well as classroom instruction on or off campus—can be utilized to extend college opportunities to many more students on a self-support basis, with a consequent reduced demand upon on-campus educational facilities and resources. This would also provide for the giving of degrees through extension, and the consequent upgrading of current extension offerings.

Although the State Colleges have a limited extension program, they have never been able to devote much attention to the increasingly important field of continuing and adult education because their staff and facilities have been so overtaxed with pressures at the undergraduate level. The freeing of the undergraduate from required classroom attendance, as I have just proposed, would enable some existing facilities to be used for continuing education; and, the upgrading of extension classes to equivalency with regular academic offerings, together with the ability to mix in a single class students on state support and students on self-support, would also open the door to many who could not otherwise be accommodated. It would open up a whole new world to those who thought their opportunities were gone by.

In considering any proposal which would involve the awarding of degrees through extension, attention must be paid to improving the procedures for departmental supervision of programs, testing, and awarding of degrees. Greater use of regular faculty in extension should be provided for. Recognition of extension instruction as a part of the faculty member's expected workload would be a normal result. Regional, degree-granting extension centers, either operated by one
college or by a consortium might be considered. This proposal suggests the need to view the regular and extension programs as much more closely interrelated than is now the case. Extension courses, under these proposals, must be made equivalent to the regular academic offerings. This is the means, however, by which the door of educational opportunity would be opened to thousands and thousands of additional students, especially those who for economic or personal reasons cannot afford to take four years out of their most productive period of life to attend college.

I also believe that our colleges have been far too provincial in their accommodation and acceptance of transfer units from their sister State Colleges. Students should be encouraged to take academic work simultaneously at two or more State Colleges if they find it more convenient, more saving in time or more appropriate to their specific educational objectives. Rather than impose arbitrary barriers such as double fees, bureaucratic approval systems, and low registration priorities—this type of student should receive every assistance and encouragement we can give him. We must become far more flexible in our efforts to fit our educational programs to the particular needs of serious students.

One absolute essential to achieving the major breakthrough which I envision will be greater flexibility in staffing, in workload assignment, and in budgeting. I, therefore, propose that we abandon the present devices used for measuring staff and budget and move to a support budget based on student-faculty ratio, with different levels of support for lower division, upper division, and graduate students, and with flexibility in the use of faculty time to permit a major shift in the nature of faculty responsibility to provide greater attention to advising, counseling, and evaluating students. A key requirement for success of such utilization will be a high level of ability and resourcefulness at the Dean and Department Head level.

These proposals will place heavy additional workloads on the President and the entire internal administrative staff. Therefore, I will call on the Presidents to strengthen their top administrations by urging interested Presidents, Advisory Board members, and other citizens to aid the Presidents in establishing this new program. We need all the wisdom and expertise we can enlist in putting new ideas into effect. A flow of wise men and women from the outside would demolish any false ivory tower concepts, would put students into active relationship with business and professional men and women and would extend laymen's knowledge of the actual state of affairs in our colleges. These individuals would become ambassadors both inside and outside the college.

The attainment of the goals I have suggested will not be easy. Much thorough study will be necessary to avoid damage to an already high-quality educational program and to our existing, though limited, educational opportunity for students.

Therefore, before we undertake such a massive change wholesale in this great system of higher education, it is essential that we undertake several pilot programs. These should relate to particular major areas in certain or all colleges, and two or three colleges or entire institutions might wish to serve as pilot models for the entire plan. I would anticipate starting some pilot programs in September of this year.
The second major proposal I am making is already under way — an in-depth revaluation of three areas of our operational practices and programs.

1. Most of our students take more than the number of units required to graduate. There are several reasons for this phenomenon. Excess units sometimes result from inflexibility in the acceptance of transfer courses. We have some exorbitant requirements for majors, including long lists of prerequisites. I propose the establishment of an absolute ceiling on the requirements for the degree and for majors.

Many graduate students also take far more courses than required for their degree or credential. Other graduate students have no stated and approved objective and take courses seemingly as they would select salads in a cafeteria. This is costly to the State and not at all necessary for the student's program objective. Such students have far less call on our limited State support than do those who pursue an objective directly and diligently. A staff study is under way on this subject. I recommend that we develop a fair and equitable system whereby students not pursuing and making satisfactory progress toward a degree or credential objective be charged the full cost of instruction, and that those who on their own volition take work in excess of that required for the degree or credential also be charged full costs. In order to avoid inequity in this regard, such a charge would need to be phased in over a three- or four-year period, and adequate safeguards to protect students caught out of phase must be established. I recommend that this principle be applied beginning in the Fall of 1971. The income from the charges which I will propose could amount by 1974 to ten or fifteen million dollars a year.

2. Over the past several years attention has been given by the Legislature, the Coordinating Council, and the colleges to more effective space utilization. Year-round operation and the concomitant shift to the quarter system have been Trustee and legislative objectives. This has been implemented in part, and I will urge the Legislature to allocate additional essential planning and support funds so that it can be further implemented. Beyond this, the State College system has made strenuous efforts to expand utilization within the existing academic year.

The people of California and their elected representatives should be made fully aware of the already remarkable accomplishments of the State Colleges in the area of efficient utilization. I call to your attention the just issued Coordinating Council publication of January 1971, Inventory and Utilization Study for Public Higher Education. These new data show conclusively that, judging by almost every measuring device, the California State Colleges have the most efficient utilization in California higher education, and that California standards for utilization are far higher than those in other parts of the nation. "Station utilization" is a standard measure that considers both the weekly room hours and the percentage of stations occupied. The weekly station utilization of classrooms in the State Colleges last year averaged 28.9 hours. In the Community Colleges it was 23.9, and in the University of California it was 17.3. Comparable figures for the University of Michigan were 14.6. For the University of Washington it was 17.7. According to the Council's report, "A comparison of California's standards of utilization with standards from eight other states shows that those of California for classroom usage are over 80% greater than the average for other states."¹ No other institution studied matched the high space and utilization practices achieved by the California State Colleges.

Nevertheless, the study also shows that even more intensive utilization is possible. Use of classrooms and laboratories in the late afternoon and evening is far lighter than that in the morning and early afternoon. Traditionally, classes in college are held in the daytime. Extensive use of late afternoon and evening hours depends in part on provision of a full range of course offerings during these parts of the day. The State Colleges in metropolitan areas appear to make much greater use of evening hours than residential campuses—public or private. This is difficult to justify, for students in residence may very conveniently use late afternoon and evening classes. I propose that the use of late afternoon and evening classrooms and laboratories be greatly expanded and also that effective Saturday use of these facilities be started in the Fall at all State Colleges.

Imaginative procedures may be needed to fill late afternoon and evening classes. In order to handle more students in the same classroom and laboratory space, it will be necessary to expand the number of faculty office spaces, to provide additional equipment in order to increase the utilization potential of laboratories, and to provide funds for additional administrative supervision in the late afternoon and evening, and on Saturday, and more public service staffing to provide longer library hours. This small added investment will be only a tiny percentage of the long-term savings brought about by this intensified, more efficient use of our facilities.

3. We have long known that the costs per student have varied greatly among the 19 colleges and between various curricular programs. I have directed my staff to prepare a detailed analysis of costs, by subject field, by major, by schools and divisions and by degrees, both undergraduate and graduate. Preliminary results indicate a very wide variation even when programs are comparable. Some of this variation is a concomitant of size—very small institutions and new programs of necessity being more expensive. However, much of the variation is difficult to explain if the programs are of equivalent quality. We will make a careful analysis of these data to determine whether costs of some programs can be reduced without loss of quality, and whether it is unsound to continue certain programs at some colleges.

What I am proposing should result in a number of economies. These will not be evident at once and will have little impact in 1971-72, but thereafter should be quickly cumulative in economic benefit. Therefore, while my chief reason for these proposals is educational excellence, significant eventual savings should result.

Following further consultation with the Council of Presidents, and with faculty leadership, I plan to appoint two coordinating task forces as necessary to do the following:

1. To examine the data and make recommendations for more efficient operation under current practice. This will include a tuition proposal for those who take excess units or units not directed toward a degree or credential, a proposal for more extensive use of our facilities, and recommendations for the modification, consolidation, or elimination of inefficient, high-cost programs.

2. To recommend means for the development of pilot programs and a timetable for implementing some of the basic changes I have outlined, both with regard to the use of different criteria for the awarding of the degree and the expansion of college service as an "open" university.
The changes I propose cannot be brought about effectively without the support of the colleges and their faculties. Many of them cannot be realized without the cooperation of State agencies in modifying the budgeting process and providing greater flexibility. The use of all of our best talent will be essential. However, I believe we have the potential here for great benefits to our students, the State, and higher education itself. As a faculty member myself, who spent more than a decade in the classroom, I look upon these proposals as vastly rewarding to all faculty members who are fundamentally concerned with the end product—the educated graduate—rather than with the systems, the bureaucracy, and the time-worn practices which served well in another day, but which now are anachronistic in a more complex time. These proposals, when realized, will enable us to avoid turning away so many students, and at the same time an emphasis on self-support and extension will enable the taxpayer to feel that we do have consideration for him. Finally, and very importantly, this will enable the competent industrious student, who is bored and frustrated with our complicated lockstep to the point where he often becomes a dropout, to march at his own pace with the challenge of achievement—and no wasted time—constantly before him.

None of these proposals precludes continuing attention to the disadvantaged or to ethnic minorities. In fact, such attention would be facilitated.

In addition, the fact that we are awarding a degree based on a cumulative and carefully thought-out body of knowledge and skills, which the student must master, not in bits and pieces as at present, but as a demanding whole, makes the student a far more active participant in the learning process. Instead of sitting in large groups to be lectured at, with a fixed term of years, much like a prison sentence, before him, he will proceed at his own pace, and when he has mastered his subjects, can be examined on them, and evaluated, and can then move on. The only limitation will be that he will not be allowed to move so slowly that he becomes a burden to the State.

This to me is genuine education. It puts a premium on individual initiative in the learning process. It frees our crowded classrooms and laboratories from those who do not need them, or who, because of high ability, can move on quickly to other tasks. And it opens the door to thousands who want to learn, and who can pay for the privilege, but for whom there has been no room in our crowded schedules.

Such changes, complex and difficult as they are, are necessary. Our current systems, effective as they have been in the past, are at this moment on the edge of failure. The impersonality of the large institution, the sharp horns of our immediate dilemma between quality and numbers, the unwillingness of our clients, the students, to accept much longer the rigidities of our present systems—all combine to force change upon us. Let us make these changes as they should be made, voluntarily and with careful planning, rather than waiting to have them forced upon us, and let us carry on the State College tradition of not being afraid of something new.
A NEW APPROACH TO HIGHER EDUCATION ... FOR THE CALIFORNIA STATE COLLEGES

by

Glenn S. Dumke, Chancellor
The California State Colleges

The enthusiastic response, from across the nation and within The California State Colleges, to the “new approach” I presented to our Board of Trustees last January confirms my belief that the need for substantial change in higher education is not only urgently needed — it is long overdue. I take pride that the nineteen California State Colleges are at the forefront in a period of dynamic change for all of higher education.

Following my call for a systemwide search for new and better ways to meet the real needs of students and society in the 1970’s, my office received dozens of proposals for pilot programs. To spread the evaluation of these proposals as widely as possible within the State College community, I appointed in February two Task Forces and in April a Commission — each consisting of representatives from my staff, the Presidents, and the Statewide Academic Senate — to study each proposal and to pursue the goals of the new approach.

Task Force Number 1 is concerned with Innovation in the Educational Process; Task Force Number 2 is focusing on Improving Efficiency in the Use of Resources; and the Commission is developing programs for external degrees. These special groups — supplemented by sub-committees at systemwide and campus levels — not only reviewed a variety of proposals and reports during the summer, but also developed several pilot programs which are now under way.

One premise in the new approach is that the time spent in college can be reduced for many students, if not for most, by (1) a deliberately strengthened advanced placement working relationship with the high schools and (2) a broadened program of comprehensive examinations given lower-division college students. I can report progress in both of these areas.

With regard to advanced placement, we have recently adopted a uniform systemwide policy (common passing or credit scores) for the awarding of credit in conjunction with the College Board Advanced Placement Program. Students will receive six semester units of credit for a score of three or better on any of the AP tests.

In the area of comprehensive examinations, two campuses — San Francisco State College and California State College, Bakersfield — have joined in a pilot project whereby students can earn credit by passing tests developed through the College Level Examination Program (CLEP). Nearly 1,100 entering students at these two campuses took general exams this month. With the aid of the College Entrance Examination Board and Educational Testing Service, the State Colleges were able to administer these tests without cost to the student and with only a modest investment of system funds. Students who pass one or more of the five tests will earn credit applicable to the bachelor’s degree — applied specifically to the General Education-Breadth Requirements.

Final results of these tests are now being tabulated. In addition, questionnaires designed to determine relationships between prior experience and performance, why students seek to accelerate,
how they prepare, etc., are being processed. The analysis of this information should give us a clearer focus on the credit-by-examination role and, hopefully, open still additional avenues for exploration.

While final determinations on these tests are yet to be made, it is certain that the State Colleges will be awarding credit by examinations far more extensively than in the past.

The Commission on External Degree Programs, working with Chico State College, currently is evaluating the initial phase of the first pilot extended degree program to be undertaken by The California State Colleges. Under this program, unique in higher education in the West, residents of Northern California regions served by two Community Colleges (Shasta College in Redding and Lassen College in Susanville) have begun this fall to earn a bachelor’s degree in public administration without attending the Chico campus, which is from 70 to 120 miles away. A student can complete his degree by combining 70 units of two-year Community College work, 24 units of extension, and 30 units of summer session State College residence credit offered at the Community College campuses. This exciting venture is being watched closely in terms of its promise for wider applicability, particularly in those degree programs not requiring specialized upper-division facilities. The Chico program certainly contains significant potential for subsequently extending higher education opportunities to many hundreds of students in areas of the State not now within commuting distance of a State College.

In December the Commission on External Degree Programs will conduct a comprehensive conference on external degree programs and a market survey. This systemwide conference and the survey will enable the State Colleges to define— and thus, better serve— entire populations who, for various reasons of geography and individual backgrounds, have not previously been afforded higher education degree opportunities.

The State Colleges are most pleased that the Carnegie Corporation in New York has expressed an interest in our new approach to higher education and during the summer provided a planning grant to develop a comprehensive proposal for additional funding. This proposal, which envisions innovative approaches to instruction and evaluation on three campuses—San Francisco, Bakersfield, and Dominguez Hills— with results that might well be transferable to other campuses, has been submitted to Carnegie Corporation. Though the approaches vary in detail, all three proposed projects stress the need to make it possible for students to accelerate their progress toward the bachelor’s degree by certification procedures apart from the standard lecture-discussion and laboratory courses. I am hopeful that funding will be forthcoming soon to initiate this major 18-month, three-campus project.

The State Colleges also are seeking support from Federal agencies and other foundations for development funds for computer-assisted instruction, faculty development institutes, and a variety of other undertakings where preliminary planning has been completed.

At the same time, the Board of Trustees has endorsed a staff proposal for review of high cost/low benefit programs which is likely to lead to phasing out a number of low degree producing undergraduate and graduate degree majors.

It is gratifying to be able to report this much progress at this time. However, we are not overlooking the fact that some of the most significant changes are likely to require thorough, painstaking, and time-consuming exploration and discussion. As decisions are reached and additional projects are implemented, subsequent reports of our progress will be issued.