

University of California, Santa Cruz

Shaping Our Future:

Planning for 15,000 Students

Adopted Unanimously by

Santa Cruz Division

Academic Senate

27 May 1992

1. We Have These Purposes

The main purpose of this document is to provide a general framework that can be used in planning for the future academic growth of the Santa Cruz campus for the University of California as it matures to its ultimate size of 15,000 students somewhere around the year 2005. It is a planning statement, not a plan. It serves as a high-beam headlights to illuminate our road, with the periodically updated divisional plans serving as the fog lights for the close-up view of the same terrain.

However, the document has other purposes besides setting out a general framework. It is meant to remind us of our past commitments and to explain the constraints on some of our planning. It is meant to stimulate further thinking about new educational initiatives. It outlines a planning process that allows faculty to take advantage of the new growth opportunities as they occur.

More specifically, this planning statement spells out the assumptions and objectives upon which our academic growth should rest. It provides linkages with earlier academic planning. It provides a rationale for why the key objectives were chosen.

This planning statement builds on a number of sources. It is in some ways a refinement and augmentation of the *Twenty Year Plan* of 1985¹, as further elaborated in the *Long Range Development Plan of 1988*². It draws upon the *2005 Report*³ that came out of the exploratory and consultative work of the 2005 Committee appointed in 1990 by Chancellor Robert Stevens. It builds upon ideas developed in the three-month discussion of the 2005 Report on email, in student forums, and in three Academic Senate committees: Committee on Planning and Budget, Committee on Educational Policy, and the Graduate Council. There also was consultation with the Chancellor, the Academic Vice Chancellor, Associate Vice Chancellors, and the staff members in the office of the Academic Vice Chancellor. A report by former Acting Dean James Gill on the growth of the graduate programs⁴, which was an appendix to the 2005 Report, is attached as Appendix 1. Many of the planning decisions to be made in the context of this general framework will be made by people not currently part of the Santa Cruz campus community. This statement therefore aims to preserve flexibility, opportunities for innovation, and incentives for entrepreneurial initiatives within a campus that is always evolving and changing.

2. We Hold These Assumptions

This planning statement builds on a number of assumptions. Some of them will appear obvious to longstanding members of the campus community, but it is important to state them so that the reasoning behind the document is as clear as possible to current and future participants in planning discussions. Other assumptions will appear dubious to many readers in a time of continuing state budget crises and constant cutbacks in the university, but it nonetheless is essential to plan for the inevitability of growth, because it is far easier to slow down a planning process than it is to move quickly if and when economic growth and/or university expansion begin again. This campus needs to be ready to take advantage of future opportunities if it is going to attain the economies of scale, diversity of programs and quality of

¹ *University of California Santa Cruz Twenty Year Plan, July 1985.*

² *University of California Santa Cruz Long Range Development Plan 1988.*

³ *2005 Report, University of California Santa Cruz February 20, 1992.*

⁴ James Gill, *Academic Planning to 2005: Graduate Division, University of California Santa Cruz, 26 December 1990.*

undergraduate and graduate instruction that will insure its distinction within the University of California.

First, this document assumes that the number of students eligible for entrance into the University of California will increase significantly between 1992 and 2005, and that it is incumbent upon the Santa Cruz campus to take its appropriate share of these new students.

Second, this document assumes that the state of California and the nation at large face a number of challenges as we approach the 21st century, and that it is incumbent upon the Santa Cruz campus to help meet them. These challenges include “the growing ethnic and cultural diversity of the state, with attendant problems of education and opportunities for development; the increasingly complex problems of human interaction with the environment; the problem and opportunity of developing a system of education to prepare young people for life in the 21st Century; the problems and opportunities associated with the advance of technology, particularly computer and electronic technology; and the problems and opportunities presented by the complex mutual [global] interdependence of all aspects of the physical, social, and cultural worlds.”⁵

The third assumption underlying this document is that there will be a growing need for highly educated people in American society in general and California in particular. As population increases and organizations become more complex, more expertise will be needed in everything from environmental quality to organizational maintenance to community morale and harmony. As the population grows older and diversifies in cultural background, there is a growing need for new approaches to education and for a wide range of social services. Thus, the need for Ph. D.’s and professional degrees will increase rapidly between 1992 and 2005, possibly more than doubling for Natural Science and Engineering, but also increasing for a wide number of other fields. It is estimated that the University of California itself will need to hire 10,400 faculty to cover retirements and growth

⁵ 2005 Report.

through the year 2005⁶. In keeping with its mandate under the Master plan adopted by the government of California in 1960, it is the mission of the University of California to provide the needed expertise for the State.⁷

The University may provide instruction in the liberal arts and sciences and in the professions, including the teaching professions. It shall have exclusive jurisdiction in public higher education over instruction in the profession of law and over graduate instruction in the professions of medicine, dentistry, and veterinary medicine. It has the sole authority in public higher education to award the doctoral degree in all fields of learning, except that it may agree with the California State University and colleges to award joint doctoral degrees in selected fields. It shall be the primary state-supported academic agency for research.

Fourth, this document assumes that there will be adequate resources available to educate all those students who are eligible for the University of California. It is assumed that these resources will come from a combination of state, federal, and private sources. If revenues provided by the state general fund continue to decline, as they have over the past 20 years, and especially in the past two years of the current budget crisis, there will be an increasing emphasis on student fees and private gifts and even tuition. Whatever the funding mix turns out to be, the Regents have made it clear that they intend to maintain access to the University of California while at the same time maintaining its high standards and quality. It is therefore essential to plan with their assumptions clearly in mind.

Fifth, this document assumes that resources within the University of California will continue to be allocated by means of a weighted-ration formula that assigns different weights to students at different stages of their academic careers. Specifically, graduate students working on their

⁶ *Future of Graduate Education in the University of California: Changing Job Market Opportunities and Assessment of Needs for UC Graduate Enrollment Growth*, April 1991, Office of the President, University of California, Oakland, CA.

⁷ A Master Plan for Higher Education in California, 1960 – 1975, California State Department of Education: Sacramento, 1960.

dissertations are assigned a weight of 3.5, graduate students below the dissertation level are assigned a weight of 2.5; upper-division students are assigned a weight of 1.5; and lower-division students are assigned a weight of 1.0. This weighted-ratio formula for allocating resource to campuses within the University of California has enormous implications for campus planning(see Appendix 1). It plays a very large role in many of the objectives and rationales that are set forth later in this document. Growth in graduate students will provide the added faculty who will be needed to sustain our undergraduate programs now that the campus has reached the age where it is likely to be funded solely on the basis of the traditional formula.

Sixth, this document assumes that the Santa Cruz campus has several advantages as it enters into the competition with other campuses for the resources that are allocated by the Office of the President. One important advantage is its magnificent setting between the Monterey Bay and the Santa Cruz Mountains, adjacent to many state parks and the Monterey Bay Marine Preserve, making possible initiatives that respond creatively to the environmental challenges facing the state and nation. The campus also has the advantage of being located in a community that supports the arts and performance, making facilitating new initiatives in theater arts, music, or visual arts. In addition, the proximity to Silicon Valley encourages initiatives that respond to the continuing need for innovation in computer and information technologies. It has one of the most culturally diverse faculties in the University of California system, giving it many opportunities to develop educational initiatives that respond to the growing cultural diversity of the state. Equally important, the campus has an array of individualized residential colleges that are unique in that they house many faculty, academic program offices, and research centers; the existence of these colleges provides the possibility for new educational initiatives at both the undergraduate and graduate levels.

The seventh assumption underlying this document is that any new directions taken by the Santa Cruz campus should build upon existing programs and emerging clusters of faculty interests across boards and divisions in order to

make the most efficient use of new resources. Such an approach makes possible smoother transitions and economies of scale in staffing as well as a cooperative ethos so critical to the campus's intellectual health.

The eighth and final assumption of this planning statement is that, in order to reach and maintain major distinction, a campus of the University of California must have a wide range of programs across the natural sciences, social sciences, humanities, and arts at both the undergraduate and graduate levels. It does not have to have undergraduate and graduate programs in each and every discipline that is present on much larger university campuses, but it should have strong programs in all traditional areas of scholarship, research, and performance, as well as a carefully selected array of non-traditional areas, so that students can receive a balanced education of the highest quality.

3. We Seek These Objectives

Within the context of the eight assumptions presented in the previous section, the campus should seek to reach the following goals in the next 12 to 15 years:

First and most obviously, it should reach a maximum of 15,000 students at its steady state somewhere around the year 2005. This objective is in keeping with the agreement reached with the Santa Cruz community as part of the *Long Range Development Plan* of 1988, and it is important to state that the campus intends to honor that agreement. This objective also is in keeping with the continued population growth of the state, making it possible for the Santa Cruz campus to share in the education of the growing number of California citizens.

The second objective of this document is to have a mix of 12,000 undergraduates and 3,000 graduate students when the steady state is reached. This objective is an essential one if the campus is to compete for resources within the University of California system and provide quality education,

given the weighted-ratio formula that was discussed as one of the guiding assumptions of this planning statement.

It is useful to recall that it was always the objective of the Santa Cruz campus to have a significant percentage of its students in graduate programs. This fact is sometimes lost from sight because of the slow growth of the campus in the early 1970's, and the decline in enrollments in the late 1970's, precisely the decade when the campus planned to accelerate its growth in graduate enrollments. From the beginning, the goal has been to avoid conflict between undergraduate and graduate education, fostering a creative symbiosis between them.

The third objective of this planning statement is to have a balance of academic and professional programs for the 3,000 graduate students. Since there are only a little over 900 graduate students on the campus at this time, this objective leaves ample room for growth for current and new academic graduate programs as well as for initiatives in the area of professional programs and schools.

The need for professional programs and schools beyond the recently approved School of Engineering has two rationales. First, and most important they are needed to provide the campus with greater intellectual balance and diversity. The campus needs to have graduate programs that are seen as "practical" and "useful" if it is to attract large numbers of graduate students, especially in times of declining interest in the liberal arts, such as occurred in the late 1970's. Second, the campus needs professional programs in which students pay a greater share of the actual costs because it will not have the fellowship and other financial support that would be necessary to fund 3,000 academic graduate students; the argument has been presented in the report by Gill (see Appendix 1).

In fact, it would be ideal if as many as half of our 3,000 graduate students were in professional graduate programs. This is a highly ambitious objective, and it is not at all clear that it can be reached by 2005 given the fact that the largest and most attractive professional schools, such as

medicine, business, and law, are not feasible for this campus, the community is too small for a major teaching hospital and the University of California has no need for further schools in any of these three professions.⁸ Thus, there seems to be considerable opportunity to create a half dozen or more professional programs or schools of modest size that could build upon, and in turn contribute to, a diverse set of existing campus strengths from every division. In some cases these new professional programs might exist as “tracks” within the boards that also offer MA or Ph. D. programs. Just as the School of Engineering developed out of strong programs in computer engineering and computer and information sciences, so too could new professional programs develop out of current faculty interests and strengths in music, drama, marine sciences, environmental studies, multicultural science, math education, and several other disciplines with policy and applied dimensions.

The fourth objective advocated by this planning statement is to continue the strong liberal arts focus of undergraduate education on the Santa Cruz campus through the growth of existing boards and programs. This objective means a continuing emphasis on general education, including attempts to assure that no majors will require so many courses as to crowd out the possibility of a wide range of elective courses, and support for interdisciplinary programs individual majors. In addition, the campus should consider a variety of means to increase, undergraduate research experience.

In keeping with this fourth objective, we further propose that any new professional programs or schools should contribute to the undergraduate curriculum through courses and perhaps small pre-professional programs. This guideline for integrating professional school faculty into undergraduate education would be relatively unusual among University of California campuses, and it would make clear our continuing commitment to a strong

⁸ The University Committee on Planning and Budget, in reviewing recent UC task force reports, concluded there was need for growth in engineering, but no need for additional law or business schools in UC. The UC task force report on Education Schools is expected December 1992.

undergraduate program while at the same time helping to assure that there will be qualified students interested in entering the professional programs.

The fifth objective proposed by this planning statement is to encourage new ways to integrate undergraduate and graduate education. Having professional program faculty teach undergraduate courses, as suggested in the previous paragraph, is one way this can be done, but it also might be possible to include more of our very best seniors in graduate courses, and to encourage graduate students to work with undergraduates on research projects. There also might be ways to utilize the colleges in realizing this objective, which brings us to our sixth and final objective

It is the sixth and final objective of this planning statement to propose that new and better ways be found to utilize the colleges in strengthening undergraduate education, particularly in the lower division, and in integrating undergraduate and graduate education. In its report on the intellectual and cultural life of the colleges, the joint subcommittee of the Academic Senate on the role of the colleges envisioned a future in which “colleges and boards see themselves as working together synergistically and symbiotically, playing different roles in accomplishing common goals,” with the colleges realizing their potential “to create communication within the context of diversity; to encourage contact between students and faculty; to forge more fruitful connections between research and teaching; to insure interaction between purely academic and broadly social contexts and concerns; and to offer students the opportunity to reflect on their studies from a wider, more integrated perspective than that offered by any one major.”⁹ In that spirit, it might be possible to have a Graduate College that included among its graduate student residents some upper-division students who were working on theses or research projects. It also seems possible that some aspects of residential and extra-curricular life in some colleges could be related more closely to academic pursuits. For example, bilingual residential houses could enhance students’ language skills and their

⁹ The CEP/CPB Subcommittee Report on the Intellectual and Cultural Life of the Colleges, April 1992, pp.1-2.

appreciation of cultural diversity. Students interested in particular areas of the world could benefit from living with international exchange students.

In closing this section, it should be emphasized that the examples provided for meeting our objectives are only meant to be suggestive. They could not be adopted without much discussion and study, and they may be displaced by far better ideas. It is the objectives that are essential, not the specific means by which they are realized.

4. Making The Future Together: The Planning Process

The previous sections have been purposely general. Perhaps they may seem overly general to those who think of an “academic plan” as a bulky and detailed document that outlines specific programs, allocates resources, and provides a time schedule.

In point of fact, this planning statement has been very specific about the issues that matter most to the future of this campus—its size, its undergraduate/graduate mix, its need for programs leading to cultural and intellectual diversity, its need for a continuing commitment to the liberal arts at the undergraduate level, and its need to be more creative in its use of residential colleges. If this planning statement helps us to focus on those needs, it will have accomplished much of its task.

Nonetheless, the document would be incomplete if it did not specify the means by which faculty, students, and administration should work together to bring about growth in existing undergraduate and graduate programs, new academic graduate programs, and new professional programs that will be needed if we are to reach our objectives. Thus, it will be the purpose of this section to spell out just how the planning process should operate so that faculty and students will be assured that have a voice in the process.

First, new initiatives should come from existing programs and from newly formed groups within the faculty that want to be part of the growth process. They should not have to be asked by the administration to come forth with new ideas and proposals for existing or new programs, although it would be

appropriate for deans to remind faculty of their opportunities and to offer suggestions. Instead faculty should assume that this planning statement is an open invitation to everyone to participate in the process. Given our growth objectives of 3,000 new undergraduates, 2,000 new graduate students, and 450 new faculty, there is potentially at least something for everyone who participates. It is not a zero-sum situation.

If it is the faculty who should come forth with initiatives, it is the administration that has to provide the resources to help faculty develop the initiatives. That is, this planning statement recognizes that not every academic unit or faculty cluster starts with the same capabilities when it comes to planning or expanding a program. If everyone is to feel that they have an honest chance to see their plans realized, then the administration should stand ready to provide appropriate support for planning endeavors which cannot be carried out within a unit's existing resources.

Within this context of faculty initiative and administrative support, there is clearly a need for close collaboration between faculty and administration in developing specific plans. We expect that there will be frequent interaction as any plan or program develops. At the same time that it is encouraging proposals, the administration must make clear that it will work with faculty to improve proposals that are not yet fully developed.

Of course, not every preliminary proposal will ultimately achieve programmatic realization. Five thousand new students and 450 new faculty constitute a large amount of growth, but the possibilities are not infinite. The campus will need to determine which initiatives, in combination with existing programs, are most likely to help the campus achieve its overall goals. Therefore, this document envisions an open competition for resources a framework of fair access for all entrants through the support services of the administration.

Growth of different boards and programs will not necessarily be at the same rate or in the same proportion. There should be selective academic development consistent with a realistic range of resource expectations. Proposals for growth should be evaluated according to the following criteria:

1. Programmatic need within the discipline

2. Relevance to undergraduate and graduate recruitment and retention
3. Ability to help support new programs and interdisciplinary programs
4. Opportunity for excellence
5. Opportunities for Focused Research Activities (FRA). Organized Research Unit formation (ORU), graduate and undergraduate support
6. Demonstrated ability to build on existing campus strengths
7. Resource effectiveness
8. Uniqueness within the University of California

How, then, should specific growth plans be acted upon by the faculty and administration? First, divisional deans and the graduate dean should play major roles, in keeping with the efforts of the administration to decentralize more responsibility to the divisional level. Deans should be pro-active in urging units and clusters of faculty within their purview to take advantage of the consultative services provided by the central administration, and they should play a major role in shaping the package of proposals coming out of their divisions by working closely with board chairs.

Once proposals have reached a draft stage, they should be brought to the Academic Senate by the relevant divisional dean or deans. This Senate input, through the appropriate committees, should then go to the Academic Advisory Council, Academic Vice Chancellor, and Chancellor. The Academic Vice Chancellor, in consultation with the AAC and Chancellor, should return the proposal within an agreed-upon time period to the initiating unit, with a clear, reasoned indication of whether it makes sense for the campus to pursue the initiative further and, if so, with suggestions for improvement and estimates of the amount of resources likely to be allocated to such a proposal. If the draft shows promise, it would then be turned into a final proposal that would be returned to the Senate and administration for formal consideration.

Student involvement in the planning process will take place in a number of ways. First, students should be represented on boards of studies and on college academic planning bodies. Second, draft plans should be made available for student, staff, and faculty comment through campus-wide electronic and printed media. Third, students will serve on the relevant Academic Senate committees that participate in various aspects of the planning process.

Even with our objectives clearly stated and a planning process in place, there is no likelihood that the objectives can be reached without a continuing effort by the administration, to remind the campus community of academic planning goals and strategies and of the means for community participation in the planning process. The administration must make this effort one of its most important responsibilities.

Ideally we can approach the target size of 15,000 students with the growth evenly distributed over time. However, there may be slow or no growth in the next few years due to the state budgetary crisis. Given the time it takes for new programs to be planned, any growth beyond that will come from programs yet to be proposed. It is important to initiate now the study and evaluation of those future programs. Otherwise, the buildings, equipment, start-up funds, faculty and staff positions and other essential resources will not be available when they are needed. It will likely take as long as ten years from the initial proposal of many programs to their implementation, particularly if major capital outlays are involved.

5. There Will Be Costs, But Also Benefits

Any growth strategy that we might adopt will have resource implications in terms of monetary costs, faculty and staff energies, and the physical environment of colleges, classrooms, and research facilities. There will be costs, but there also will be benefits. We believe this particular planning statement has a number of resource implications that should be a part of everyone's thinking. In particular we assume that funding for undergraduate growth will be provided primarily by the state, student fees, and tuition, but graduate and professional growth will require special funding strategies.

1. To reach 3,000 graduate students, faculty will need to focus on support of graduate students and recruitment of top graduate students. Fortunately, NSF and the federal government seem to be oriented to increasing support to train leaders of tomorrow in science, math and engineering. It also so seems likely that there will be federal and state funding for initiatives in multi-cultural and science education.

2. Recruiting faculty to reach 900 FTE—a 90%¹⁰ increase in faculty—will be difficult. Other universities and industry will be competing for hiring. Adding to the problem is the fact that we will hire an additional 120 faculty to replace retirements of faculty currently here. New faculty require startup-funds for their research programs particularly in the natural sciences and engineering. By building on existing strength where equipment can be shared, these costs can be minimized, and spreading the hires out over the entire period will avoid peak costs.
3. Evaluating which new programs to launch and launching them will require considerable faculty and staff time, as will the recruiting of new faculty. Proper phasing of studies and recruiting will be necessary within the divisions and between divisions.
4. Buildings will be needed to house the expanded campus population. It is important to this campus to plan its physical growth on the basis of the Academic Plan and a Space Plan, and then bring the buildings into existence on time with the support of the faculty and students.
5. A larger campus population requires more efficient means of communications in order to inform the community, and to support interdisciplinary and global teaching and research activities of the future. The needs range from establishing an “official” campus newspaper to establishing network connections for all members of the community and providing equipment, training, and support.
6. Positive opportunities for external fund-raising arise in the creation of new programs as well as in the¹¹ expansion of a number of existing

¹⁰ “The conclusion we draw from our studies of the academic labor market is that higher education may be heading into unprecedented competition for the best talent. . .our projections suggest that a huge replacement task lies ahead calling for around 500,00 new academic appointees or 20,000 per year on the average. Moreover, there would be no period within the next twenty-five years without significant numbers of new instructional staff within the not-so-distant future.” H.R. Bowen, and J.H. Schuster, “Outlook for the Academic Profession,” *Academe* 71, September-October 1985. Pp. 9 – 15.

¹¹ Donors give firstly to “vision” and secondly to “performance.”

programs. Further, the facilities that the new programs bring to campus and the funding of indirect costs will greatly increase the resources of the campus. The challenge will be to utilize these new resources efficiently.

7. The increased social, economic, and cultural contributions made by the campus in 2005 will improve community support for the university.

Conclusion: The Future is Now

A planning statement is the beginning of a planning process, not the end of it. We should discuss this academic planning statement now so that we can begin immediately the development and evaluation of specific proposals for those programs that will be part of the Academic Plan to round out the campus. Let's make the future ours by finding ways to help realize the objectives spelled out in this document.

APPENDICES

Appendix I – FTE Allocation Projections

Appendix A- Twenty Year Plan, July 1985

Appendix B – Committee 2005 Report: Graduate Division, December 1990