

ACADEMIC PLAN
University of California,
Santa Cruz
1970-1980



February 22, 1971

PRESIDENT HITCH

Re: Proposed Academic Plan, Santa Cruz Campus

1970-80

Dear Charles:

Attached for transmittal to The Regents is the proposed revised Academic Plan. It has been six years since The Regents adopted in principle "Santa Cruz Campus Academic Plan, 1965-75."

In that period great changes have been made. In January 1965 we wrote about our expectations of turning educational ideas into realities, field and forest into an environment for learning, and empty faculty and student places into a body of teachers and scholars.

Most of what we planned has happened. There is a decentralized system of five colleges and a sixth that will open next September. Physical facilities have been built that have won an extraordinary number of architectural awards. Student demand for admission, year after year, has been around four times the number of places available. And faculty recruitment, in my biased opinion, has yielded a teaching staff matched by few if any new colleges or universities launched in this century. Despite the absorbing tasks of institution building, our scholars, scientists and artists have been productive and have made good records in creative work.

The "Plan" that follows is in part a progress report. It records both failures and successes. The campus has been denied the professional schools that it needs for well-roundedness. I regret especially not having made a modest start in Engineering and Business before the shutoff of new programs in those fields.

1965 was an awkward time for a new institution of higher learning to be born. Campus disorders were just beginning. The era of generous State support was coming to an end. Public confidence in colleges and universities was put to the test, as never before, from 1965 onward. Support budgets dropped proportionately, and capital budgets have all but disappeared.

The University has its collegiate campus at Santa Cruz. Now the question is whether we can perfect and expand it. Our conviction is that the task of building a different structure was worth the extra effort and machinery involved.

We have made no effort to conceal our shortcomings. On-campus living in residence houses is less attractive to students than we expected. It has proven difficult to build student self-government in an era of extreme individualism.

Several of the things we projected in 1965 no longer occupy so prominent a place in the new Plan. Retired professors have played a prominent role in the first five years; now most have gone and their places taken by regular appointees.

The 1965 Plan called for a larger than usual component of women in the faculty; the supply proved even more limited than anticipated, and we have been unable to recruit as many as we had hoped.

Lateral transfers from other campuses of the University have provided a valuable cadre in each of the colleges so far launched; they have proven especially helpful in transmitting traditions and practices of the University to Santa Cruz.

Care has been taken to balance the campus faculty by level of appointment. Faculty balance by seniority and level of appointment continues as an important goal.

The Academic Senate, organized during 1965-66, has played its full role in academic decision-making. Its initiative led to the adoption of the pass-fail-plus-written-evaluation system that is one of the most distinctive features of the campus. It established the comprehensive examination/senior thesis plan that requires each graduate either to pull together what he has learned or contribute a major essay in the field of his major. The Senate modified the original campus-wide curriculum by abolishing the mathematics and foreign language requirements.

Perhaps the most striking change from the 1965 Plan is our questioning of the 27,500 ultimate student population in the 1971 Plan. The campus and the Santa Cruz community increasingly are convinced that optimum size may be a student body of 10,000 to 15,000.

Finally, I wish to thank, for myself and the Santa Cruz campus, those who made possible this venture in higher education--the State, Regents, University-wide administration, and University-wide Academic Senate--for support, direction and encouragement.

Sincerely yours,

/s/ Dean E. McHenry

Attachment

PROPOSED ACADEMIC PLAN
 SANTA CRUZ CAMPUS OF THE
 UNIVERSITY OF CALIFORNIA
 1970 - 1980

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THE PLANNING PROCESS

The thoughts contained in this document represent the perspectives of 1970. The Santa Cruz plan will remain a loose-leaf document, subject to revision from time to time, as the Santa Cruz campus develops, as new needs emerge, and as improved methods of instruction become available.

The plans for the campus were developed from information supplied to the Academic Plan Revision Committee by Boards of Studies, Colleges, Divisions, Academic Senate Committees, Organized Research units, University Extension, Summer Session, and various administrative units. Student opinions were solicited through the Boards of Studies but were also present in the responses from Colleges and Senate Committees. Additional issues were raised in letters submitted by interested individuals.

The role of the Academic Plan Revision Committee in the preparation of the Academic Plan has been important. Members of the Committee were chosen as representative of the major interest groups on campus. Members were: the Chairman of the Academic Senate (also Chairman of the Committee), the Chairman of the Academic Senate Committee on the Budget, the Chairman of the Academic Senate Committee on Educational Policy, the Chairman of the Council of Colleges, the senior academic Vice Chancellor, and a faculty member. Provision was made for two students on the Committee, but delays by students in designating candidates and disagreements over an appropriate method of selection prevented students from sitting with the Committee. Consequently, it encouraged students to criticize and comment on the first draft of the plan. The Chancellor of the campus served as an ex officio member of the Committee, and two members of the administrative staff served as aides to the Committee.

The charges to the Academic Plan Revision Committee were: (1) to review the proposed plans of the various academic and support units for their educational, financial, and policy implications; (2) to identify issues that needed referral to appropriate faculty, administrative, or student groups for inclusion in their planning; (3) to agree on a draft statement of the Santa Cruz campus Academic Plan and submit it to participating academic and support units for review (the draft was also reviewed by interested faculty, staff, and students); and (4) to review the draft in the light of all additional comments and to revise the draft to a final form for submission to the President's Office.

Crucial to the success of the operation was the sense of common endeavor expressed by the members of the Committee and the striving by the members to reflect the views of the campus in a document suitable for wide distribution. The names of the Committee members are:

Robert F. Adams
 Frank C. Andrews
 Robert D. Calkins
 Donald T. Clark (Chairman)
 Robert S. Edgar (from Spring quarter on)
 Terrell L. Hill
 F.M.Glenn Willson (to Spring quarter)

Serving the Committee in an ex officio capacity was:

Dean E. McHenry, Chancellor

Serving the Committee in a staff capacity were:

Robert H. Bosler
 Lloyd J. Ring

BACKGROUNDIntroduction

The Santa Cruz campus of the University of California, opened in the fall of 1965, grew from the conviction that a reordering of academic resources could provide a better education for young people.

As an integral part of the University of California, the campus was to develop programs of instruction and research at the undergraduate and graduate levels in a wide variety of academic disciplines along with appropriate professional schools and organized research units. Quality standards for faculty were set in the University's criteria for appointments and promotions. Quality standards for students were set in the University's requirements for admissions.

The general campus proposed in plans formulated in 1962-65 was to be of a novel design. The residential college, rather than the traditional academic department, was to be the basic unit of planning and of student and faculty identification. It was hoped that this innovation in university structure would foster greater coherence and humaneness in the educational enterprise, while at the same time maintaining fiscal soundness, educational quality, and academic excellence.

Other features of the early plans were an emphasis on undergraduate instruction, residential living, distinction in the arts and sciences, and close instruction.

The Santa Cruz plan has now become a reality. Going into its sixth year, the Santa Cruz campus in Fall 1970 enrolled approximately 3435 undergraduates in five colleges and an additional 265 students in ten graduate programs. Gathered together is a faculty of able scholars and devoted teachers. As measured by awards and accomplishments, the graduating students are among the very best in the country. Students and faculty alike share a dedication to and an excitement about the campus and its novel venture.

A sound beginning has been made, but it is only a beginning. The growing number of newly developed campuses across the country which have a design similar to Santa Cruz indicates a growing awareness of the need to change traditional procedures to face the educational needs of a rapidly changing world. U.C. Santa Cruz may be on the right track but there is much to do. Campus educational resources must be strengthened and diversified; the campus must grow in size; and faculty members, students and administrators must continue to innovate and to improve what already exists in order to bring full flower the promise of Santa Cruz.

It is appropriate now to pause and see how far the campus has come and in the light of this understanding chart a future course. This document reflects such campus self-appraisal.

Genesis

The need for another multi-purpose campus in Northern California was first indicated publicly in the Additional Centers report of 1957. Projections of the State Department of Finance showed that without new campuses, the Berkeley campus might be called upon to instruct 27,400 students by 1965 and 35,200 by 1975. The "South Central Coast" Counties (San Mateo, Santa Clara, Santa Cruz, San Benito, and Monterey) were designated the appropriate region for

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a general campus. A new campus program was strongly recommended by the All-University Faculty Conference of 1957. The Regents in October 1957 authorized three new campuses: South Central Coast, Southeast Los Angeles-Orange, and San Diego; they called for further study of a campus in the San Joaquin Valley.

After a thorough site selection study, The Regents narrowed the choice for the South Central Coast to two possibilities: the Almaden Valley of Santa Clara County and the Cowell Ranch of Santa Cruz County. In March of 1961 the Cowell site was chosen; the following July Dean E. McHenry was appointed Chancellor and the campus received a general allocation of functions in the University-wide Academic Plan. In February 1962 a physical master planning design team, headed by John Carl Warnecke, architect, and Thomas D. Church, landscape architect, was chosen. The resulting Long Range Development Plan was accepted by The Regents in September, 1963. In July 1962 offices for the Chancellor and planning cadre were opened in Santa Cruz.

During 1961-62 substantial agreement was reached between University-wide and campus administrations on several major academic features including the following emphases: (1) the "college" as the basic unit of planning, and of student and faculty identification; (2) initial concentration on undergraduate liberal arts education; (3) the residential nature of the campus; (4) early distinction in the arts and sciences: humanities, social sciences and natural sciences; (5) a restricted curriculum, designed mainly to serve students' needs rather than reflect faculty interests; (6) stress on tutorials, seminars, and independent study; (7) a program of intramural sports. In November 1962 The Regents approved in principle a provisional academic plan based on the collegiate concept.

During 1963-64 the founding Provost of Cowell College and the Business and Finance Officer were appointed, detailed curricular plans were proposed, and substantial progress was made toward assembling the initial faculty. By mid-1964 construction was underway or about to begin on buildings sufficient for instruction of 500 students in 1965-66. In June 1964 The Regents amended their Standing Orders to establish the Graduate Division at Santa Cruz, with M.A., M.S., and Ph.D. degrees, and Cowell College, with B.A. and B.S. degrees. In January 1965 The Regents approved in principle the Santa Cruz campus Academic Plan.

The campus opened with 650 students in late September 1965. They had classes in two permanent buildings, and most of them were housed in trailers.

During the first five years The Regents authorized the B.A. and B.S. degrees for Stevenson, Crown, Merrill, and College V. In January 1968 The Regents amended their Standing Orders to approve a School of Engineering at Santa Cruz with curricula leading to the degrees of Master of Engineering and Doctor of Engineering.

Projected Enrollments

The number of students a campus accommodates depends to a large extent on factors beyond the control of that campus in the University of California system. The Academic Plan for 1965-1975 carried two projections: a high range and a low

range. Despite financial difficulties and the lack of facilities, the campus has come close to reaching the high range, and current projections for 1975-76 are for 7,100 against the high range figure of 7200 and the low range figure of 5350.

A closer comparison of characteristics of students reveals, however, that the graduate component is lower than originally forecast. This is due largely to the deferment of the School of Engineering, which was to have been launched in 1967.

Table 1, on the following page, shows actual enrollments for 1969-70 and projections for the decade of the 1970s. Each feature of Table 1 will be examined in order:

Lower division students exceeded upper division students in the first five years of operation, but 1970-71 showed a majority of upper division students among undergraduates. Santa Cruz intends to move to the 40/60 ratio of lower to upper division undergraduates by 1975-76, as mandated by the Master Plan for Higher Education. To achieve that goal, the campus will need a wider range of specialties, including professional schools, with majors attractive to community college graduates.

The "College Growth" figures require some explanation. The campus growth in undergraduate students is linked directly to college growth. Each college has a fixed capacity; each additional student must have a college affiliation. The colleges have some elasticity, but their effectiveness is nullified when large overloads strain their advising, teaching, social and cultural programs and facilities. The Roman numeral designates the college in order of founding. Under 1969-70 is shown the capacities for the first four colleges--Cowell, Stevenson, Crown, and Merrill--plus College V at one-half strength. Growth in 1970-71 comes largely from adding the other half strength to College V. Growth in 1971-72 stems from bringing in Kresge at half strength. These projections assume the opening of a new college nearly every year of the decade.

Graduate students growth is shown at almost high range rates, but whether it can or should be reached may be determined by developments not yet clearly seen. The leveling off of graduate applications has not yet been felt at Santa Cruz, and the 1979-80 projection is only for 20 percent of graduates among total enrollees. The present level is seven percent.

The FTE instructional load by Division shows nothing extraordinary. The Humanities, which include the arts, often carry the greatest teaching responsibility in a quantitative sense. The Social Sciences, which include Psychology, normally occupy a middle position. The Natural Sciences, which include Mathematics, have fewer undergraduate enrollments, but so far have the most graduate students at Santa Cruz.

The majors by Division are projected to move toward equality among the three. Although Santa Cruz was best known in the earlier years for humanistic studies, the campus increasingly has developed a reputation in the Social and Natural Sciences, and applicants are fairly evenly divided

6. Table I

I. STUDENTS BY NUMBERS, LEVELS AND DIVISIONS -- HIGH RANGE

	1969-70	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Total Headcount	3092	3697	4117	4955	5850	6750	7650	8550	9200	9900	10,600
Level and College											
Lower Division	1476	1693	1868	2054	2288	2478	2620	2900	3040	3200	3360
Upper Division	1462	1739	1924	2411	2912	3422	3930	4350	4560	4800	5040
Undergraduates	2938	3432	3792	4465	5200	5900	6550	7250	7600	8000	8400
College Growth	I 600	662	720	VI 373	VII 300	VIII 400	IX 300	X 350	XI 350	XII 400	XII 400
	II 700	765	770	VII 300	VIII 435	IX 300	X 350	XI 350			
	III 525	610	590								
	IV 600	665	615								
	V 500	730	820								
			VI 277								
Graduate I	84	175	201	294	390	510	660	780	960	1140	1320
Graduate II	70	90	124	196	260	340	440	520	640	760	880
Total Graduates	154	265	325	490	650	850	1100	1300	1600	1900	2200
FTE Instructional Load by Division											
Natural Sciences	728	881	1012	1192	1449	1669	1907	2156	2352	2550	2753
Social Sciences	849	1010	1147	1363	1704	2008	2304	2580	2798	3037	3276
Humanities	1457	1727	1921	2210	2689	3074	3443	3800	4062	4354	4644
Professions	69	122	92	109	135	172	232	299	356	409	461
Majors by Division											
Natural Sciences	898	1072	1194	1565	1816	2064	2326	2614	2826	3042	3262
Social Sciences	1123	1368	1523	1616	1942	2271	2578	2878	3091	3325	3560
Humanities	1071	1257	1400	1774	2092	2399	2692	2957	3138	3351	3560
Professions						16	54	101	145	182	218

STUDENTS BY NUMBERS, LEVELS AND DIVISIONS -- LOW RANGE

	3092	3697	4117	4865	5700	6200	6600	7000	7450	7900	8350
Total Headcount	3092	3697	4117	4865	5700	6200	6600	7000	7450	7900	8350
Level and College											
Lower Division	1476	1693	1868	2054	2288	2352	2360	2480	2620	2760	2900
Upper Division	1462	1739	1924	2411	2912	3248	3540	3720	3930	4140	4350
Undergraduates	2938	3432	3792	4465	5200	5600	5900	6200	6550	6900	7250
College Growth	I 600	662	720	VI 373	VII 300	VIII 400	IX 300	IX 300	X 350	X 350	XI 350
	II 700	765	770	VII 300	VIII 435						
	III 525	610	590								
	IV 600	665	615								
	V 500	730	820								
			VI 277								
Graduate I	84	175	201	240	300	360	420	480	540	600	660
Graduate II	70	90	124	160	200	240	280	320	360	400	440
Total Graduates	154	265	325	400	500	600	700	800	900	1000	1100
FTE Instructional Load by Division											
Natural Sciences	728	881	1012	1205	1402	1520	1627	1745	1875	1996	2120
Social Sciences	849	1010	1147	1378	1649	1828	1965	2089	2231	2377	2524
Humanities	1457	1727	1921	2235	2602	2799	2937	3077	3238	3409	3578
Professions	69	122	92	110	130	157	198	242	283	320	355
Majors by Divisions											
Natural Sciences	898	1072	1194	1536	1770	1896	2007	2141	2289	2428	2570
Social Sciences	1123	1368	1523	1586	1892	2086	2225	2356	2503	2653	2804
Humanities	1071	1257	1400	1743	2038	2203	2322	2420	2541	2674	2804
Professions						15	46	83	117	145	172

among the three divisions. By 1979-80, 25 percent of course enrollments are expected to be in Natural Sciences, 29 percent in Social Sciences, and 42 percent in Humanities. In majors by the same year the forecast is 31 percent Natural Sciences, 34 percent Social Sciences, and 34 percent Humanities.

Although the original mandate from The Regents called for an ultimate student enrollment of 27,500, the campus wishes to reexamine the question of maximum size. A study will be made of psychological, fiscal, and physical factors and the literature of higher education and other institutions to ascertain what size would be optimal. If a modification downwards of the goal of 27,500 seems desirable, then the campus expects to recommend a formal change in quantitative goals. The Carnegie Commission on Higher Education indicates that the optimum size of a general university campus may be between 10,000 and 15,000 students. Current sentiment on the campus and in the Santa Cruz community favors a campus of around that size.

The ultimate size of the Santa Cruz campus should be subjected to intensive study and a decision should be reached not later than 1975.

THE COLLEGES

Nature and Role

The most conspicuous feature of the Santa Cruz campus is its collegiate structure. The campus has grown each year by adding a small, self-contained college. In 1970-71 there are five colleges, each with approximately 650 students, that share the common goals of providing quality undergraduate teaching, close relationships among students and faculty, and an academic community that remains small as the campus grows large. Each college, however, is distinctive in its own right and has an intellectual "center of gravity" which stems from the interests and activities of its members.

The colleges have been designed as small, coeducational communities, each with its own patios, walkways, classrooms, and distinctive architectural style. The majority of students and a few faculty members in each college live on campus and enjoy a wide range of social and cultural programs. The residential houses are near the faculty offices; students and faculty share a common dining area; a small library, lounges, and recreational facilities encourage individual and informal group activities.

Each college is headed by a Provost who lives in the college. The Fellows, or faculty members, are drawn from many fields and with the Provost plan a program of courses to be offered in the college. Some of these courses are unique to the college; many are interdisciplinary; and others are experimental in both content and method. Faculty members also teach for a Board of Studies, or discipline, which extends across all colleges, sets criteria for majors, initiates graduate programs, and ensures the maintenance of high academic standards for the discipline. Students will normally take courses in several Boards of Studies and in other colleges as well as in their own college.

A continuing flow of people is characteristic of all universities. The communally arranged facilities and the flexible academic and administrative nature of the colleges at Santa Cruz ensure that each year the faculty and students will have a new and meaningful opportunity to define themselves in relation to one another. The small college communities are the people who live and work in them, so each year as new people come and as the interests of continuing people change, the colleges change.

An illustration of the evolution of the colleges is found in their shifts from early themes. Disciplinary emphases for the first colleges responded to the need in the early years to staff incrementally so that at least some areas could attain the critical mass needed for quality learning and research. Thus, Cowell College became known as a humanistic college, Stevenson College a social sciences college, Crown College a science college, and College V an arts college. Disciplinary themes are giving way to problem-oriented themes as new colleges are launched.

The collegiate structure combines some of the virtues of a small college with the advantages of a large university. It permits faculty and students in close association to shape and to influence their own environment. It facilitates interdisciplinary learning and research by bringing together faculty members from various disciplines. It creates a feeling of belonging and intimacy through the small college without forfeiting the wide variety of subjects, the excellence of facilities, and the search for new knowledge that are part of a great university.

During the decade 1970-80, the Santa Cruz campus will continue to grow mainly by colleges and other modular units and will accept increments of undergraduates as additional faculty and facilities become available. A new college of 600 to 800 undergraduates will be added to the campus every year or two until 15 to 20 are in operation.

When lack of capital funds delays the construction of college facilities, surge facilities are used to open the colleges on schedule. Kresge College will open in 1971 using housing provided by married student apartments, as will College 7 in 1972. Academic facilities may be available in either the Social Sciences building or the Applied Sciences building. Additional academic surge facilities for subsequent colleges were included in the August 1970 proposal for Library Unit 2. If the surge facilities become saturated, however, the growth of undergraduate enrollment will be slowed.

Future colleges may elect to focus on issues such as the environment, human values, human development, oceanographic studies, and communications. Plans have already been made for two additional colleges of this nature. Kresge College will center on environmental concerns and foster a learning environment within the college using organizational development techniques. College Seven will focus on the problems of cities and of minorities, with special attention to Afro-Americans and Mexican-Americans.

Over the decade 1970-80 the Santa Cruz campus will continue to grow mainly by addition of colleges and other modular units and will accept increments of undergraduate and graduate students as additional faculty and facilities become available.

The orientation of some new colleges will be towards problems or issues that require interdisciplinary efforts.

New Models

New organizational models for colleges will be considered during the decade. College 8 may be a non-residential "University" college that will experiment with serving the collegiate needs of commuter students through groupings in sections of 30-40 rather than in aggregates of 650. Each section would be the interest of a particular faculty member over an extended period of time. The college may be governed by a faculty council working with a "city-manager" type of administrative head rather than a provost. The college may place particular emphasis on instructional experimentation including the use of television, learning laboratories, student tutors, and small group processes. Such a college might vary in its size as innovative concepts are developed, and much of its initial complement of faculty might be drawn from the existing colleges.

One or more upper division colleges oriented to the transfer student may be established and may or may not include housing. Graduate colleges may be organized to serve the academic, social, and cultural needs of graduate students. A continuing-education college may be organized for students who wish to return to the university after some years in the non-academic world.

Conceivably the campus may develop cooperative affiliations with private liberal arts colleges. Students from these private colleges could take courses at the Santa Cruz campus while faculty from the affiliated colleges might give courses for Santa Cruz students in their fields of speciality.

Future colleges may be developed on new lines of emphasis for non-resident, upper-division, graduate, or continuing students. Affiliation arrangements with one or more private colleges are a possibility to be explored.

Residential Living

The campus was developed with residential space for two-thirds of the undergraduates to live on-campus in 1970-71. The contribution of the residential houses to the present colleges has been positive and crucial.

The potential of the residential houses for enhancing a communal college spirit continues. The houses offer the possibility of complementary interactions of peer-groups culture and academic culture due to the nearness of student rooms and faculty offices, a common student and faculty dining area, and the ready access of resident students to a college and the University Library. But a sense of community comes hard, and the success of the residential houses cannot be taken for granted. The campus remains committed to the residential houses in the existing colleges and will work to make them useful means to the goal of community.

Problems have emerged that require study and resolution. Complaints about noise, inappropriate design, cost, strict rules, and lack of kitchens appear to be increasing. Residents -- including faculty preceptors -- show less personal concern for one another. The move towards 60% upper-division undergraduates

in response to Master Plan guidelines has reduced the number of lower division students who typically exhibit the greatest interest in residential collegiate life.

In recognition of obvious problems and in anticipation of more thorough study, steps are being taken to make the residence halls more attractive. These steps include offering cooperative cleaning arrangements, natural foods in the dining halls, cooperative cooking options, use of some empty rooms as art studios, more colorful painting of rooms and halls, greater freedom for students to decorate their rooms, inclusion of a privacy clause in the room contract, alternate meal plans, and freer access to off-campus areas through provision of improved bus service (already begun as a result of a student referendum to add a \$3.50 per quarter charge for bus service to regular student fees). Soundproofing of rooms, remodeling, and provision of kitchens will proceed as small amounts of funds can be set aside.

Under discussion are proposals to convert some residential space to faculty office or classroom uses, relate the academic and residential programs more closely, and reconsider the residential preceptor and residential assistant programs.

To improve service to the residential houses, bursars, college business managers, were hired in each college. Half of the bursar's time is devoted to residential policy and operating matters and replaces the work of the residence managers. The bursars, at no additional cost, have significantly raised the quality of residential operating reports, business services including maintenance and repair, and proposals for program improvements. It is anticipated that in a manner similar to other campuses, supervision of many Physical Plant services to the residential houses will be transferred to the bursars with significant cost savings. The bursars in several colleges already supervise student work crews performing a variety of maintenance tasks.

Future colleges will benefit from the experience of the present colleges. Kresge and Seven have cut their proportions of students housed to 50 percent and will feature apartments for one-half and all, respectively, of their resident students. College Eight will most likely be a non-residential college.

The residential housing problems at the Santa Cruz campus will be resolved and a concern for proper housing at reasonable rates will continue. The campus must be cautious about encouraging private, uncontrolled off-campus dormitories such as those in the Isla Vista area near the Santa Barbara campus. Accordingly, the campus will examine various possibilities for student housing.

A thorough study of the question of student housing will be made to recommend ways of improving the present residential houses and to develop a long-term strategy for student housing.

Decentralization

The structure of the administration at Santa Cruz is unusual in many respects due to the existence of colleges. There is no Dean of Students, for example, many of such duties having been delegated to the Provosts and Preceptors (see Appendix I for a chart of the administrative organization.)

The question of decentralization to the colleges is an open one. Many support services seem better performed centrally, purchasing and accounting for example, while others, such as supporting student activities and compiling evaluations to accompany student transcripts, are clearly better supplied by the colleges. An important first step toward devolution was taken in 1970 when each college appointed a full time bursar, who manages housing and feeding operations and performs other administrative tasks.

An on-going review will be made of the administrative structure with decentralization to the colleges to occur whenever possible. Guidelines for decentralization will include costs, benefits, and adherence to the academic plans and purposes of the campus.

AND GLADLY TEACH*

Instruction

The largest share of formal course offerings at Santa Cruz is by Boards of Studies.** They are campus-wide academic units, each corresponding to a subject or discipline, and administratively grouped in one of the three academic divisions: Natural Sciences, Social Sciences, or Humanities. The Boards perform many of the functions of departments on other campuses. They set criteria for majors, initiate graduate programs, and provide the course offering for their disciplines.

The Boards of Studies are flexible in structure and often faculty belong to more than one Board. There are also Committees of Studies, groups of faculty offering specialized courses in areas where faculty strength is small. Boards sometimes combine to offer majors, as with the sociology/anthropology major, and sometimes combine within themselves unusual groupings of faculty, as with Community Studies, which includes faculty from sociology, literature, psychology, economics, politics, geography and anthropology.

About 17% of the course enrollments in 1969-70 were in courses sponsored by the colleges. These courses provide the faculty opportunities for experimentation, close student contact, and interdisciplinary work. In some colleges the courses

* Chaucer: "And gladly wolde he lerne and gladly teche."

** In 1969-70, 77 percent of undergraduate course enrollments were in courses offered by Boards of Studies, 17 percent were in college courses, and 6 percent were in Physical Education.

represent individual offerings, while at other colleges, especially Cowell College, the fellows cooperate to offer a coherent interdisciplinary core course as well as individual offerings.

In the past the Boards of Studies have tended to provide programs of study satisfying requirements for majors as well as offering courses of a service nature. The colleges have tended to be concerned with interdisciplinary general education, innovation, fieldwork, and close instruction. There are and increasingly will be, variations on this allocation of responsibility in the form of individual major programs, college major programs, and innovative board programs such as Community Studies and Environmental Studies.

The undergraduate instructional program in general features written evaluation of students by faculty, field study, independent study, student-taught courses and a three course load for students. Written evaluations accompanied by pass/fail grades have been particularly successful in focusing student attention on source material, reducing unnecessary student anxiety about grades, causing faculty members to be viewed as resources rather than as judges, and giving students feedback that helps them continually to improve. (The evaluation system will be reviewed by the University-wide Academic Senate in 1975).

Evaluations of faculty teaching effectiveness solicited from students must be presented to the Budget Committee in all cases for promotion. Students are non-voting members on almost all of the boards and committees of studies and are members of governing bodies in all colleges.

During 1969-70 approximately 10% of Santa Cruz campus undergraduates were involved in off-campus field work each quarter. The placements were varied, ranging from local schools and day care centers to Israeli kibbutzim and Italian archaeological diggings. Major sponsors of field work included Cowell and Merrill Colleges, the Boards of Studies in Community Studies, Earth Sciences, History, Anthropology, Politics, and Psychology, and the Committee of Studies in Education.

The Santa Cruz campus will remain committed to its dual academic structure of Boards of Studies and Colleges because it is effective, permissive of change, and avoids the rigidities of departments.

Class Size and Locale

Early expectations for large numbers of tutorials, seminars, and independent study courses seem to have been fulfilled. During eleven quarters between fall 1965 and spring 1969, 85% of all classes had less than 31 students, and 50% of all classes had less than 16 students. However, small classes are possible only if faculty time is available, and the steady worsening of the student/faculty ratio may soon make them rare.

The present need for larger classroom facilities to free faculty time for close instruction will be met by the Performing Arts building, now under construction, and Classroom Unit One, recently authorized from Educational Fee moneys.

The percentage of classes using college facilities over five recent quarters, excluding art and laboratory classes and including discussion groups, was 79%. The 1965 Academic Plan forecast that a "typical student" could obtain half of his courses in his own college. It seems likely this prediction has been realized.

Other provisions of the 1965 Academic Plan regarding enrollments have also been carried out: upper division courses taught by and/or in one college are open to students from other colleges; courses requiring special facilities, such as science courses and courses of large size, are taught in specialized buildings in the campus core; there is no necessity for a student who changes academic interests to change colleges.

Early expectations regarding close instruction and locale of classes have been fulfilled.

Academic Innovation

Academic innovation at Santa Cruz is as much student as faculty induced. The Boards of Studies and Colleges have been structured to permit changes, and the role of the administration is to support innovations as they are proposed.

It is expected that over the decade more students will explore the options of independent study, and, as it improves with added supervision, field work. It is likely that there will be some case studies and more project team courses, particularly in the applied sciences and administration. There will be a greater use of groups to stimulate growth in education and learning. Students will be encouraged to take the initiative in planning their own education and to utilize creatively the opportunities available. Course requirements are constantly under review.

The process of innovation assumes a willingness to accept mistakes and the courage to correct them. An important part of maintaining an atmosphere open to new ideas, as well as maintaining high standards of academic quality, will be a continuing review of innovations and abandonment of approaches that do not work.

The availability of faculty time is a limiting factor in innovation at Santa Cruz. Faculty not only have research commitments but also devote a good deal of time to the planning and development of the campus. Efforts to find additional faculty time have included a few very large courses (a strategy hampered by a lack of large lecture halls), independent and library study courses, use of teaching aids and teaching assistants, and credit by examination. The campus will search for ways to free faculty time for innovation, student contact, and research and scholarship.

Academic innovation at Santa Cruz will be fostered by hiring able faculty, encouraging alert students to come to Santa Cruz, working to create an environment receptive to change, and supporting and stimulating faculty efforts to innovate.

Undergraduate Orientation

In 1970-71 undergraduates represented nearly 93 percent of total enrollments at the Santa Cruz campus. The present undergraduate instructional program strives to develop critical thinking skills, increase student self-knowledge and social perspective, and serve students from a broad range of backgrounds. Students are exposed to the areas of humanities and arts, social sciences, and natural sciences. They are encouraged to write in English with clarity, precision, and a sense of style and are urged to read accurately and widely to assimilate the knowledge necessary to form an historical and philosophical perspective. Students develop a degree of expertness in one area of study or pursue interdisciplinary majors that demand an openness to the unity among disciplines.

During the period of 1970-80 the campus will remain pre-dominantly undergraduate even though graduate and research programs will grow in size. The present liberal arts instructional goals will evolve toward new forms.

Faculty Allocation

The original Academic Plan anticipated that by 1975 there would be one faculty member for every sixteen students, undergraduate or graduate. This ratio, called the 16 to 1 unweighted ratio, has been reached four years early: the campus was budgeted at 15.38 to 1 in 1969-70, at 15.69 to 1 in 1970-71, and probably will be around 16.75 to 1 in 1971-72.

The campus feels that 16 to 1 is an appropriate student/faculty ratio given the currently projected proportion of graduate students and the collegiate and predominantly undergraduate aspects of its instructional program.

Table II on the next page shows actual and currently projected faculty by rank over the following decade.

The campus urges the use of the unweighted 16 to 1 ratio in allocating faculty to U.C.Santa Cruz.

Table II: FTE Faculty by Rank*

	1969-70	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
<u>High Range</u>											
Total FTE Faculty	204	218	238	300	354	408	462	517	554	599	641
Professor	42	50	53	60	70	82	92	103	111	120	128
Associate Prof.	36	42	55	69	82	94	106	119	127	138	147
Assistant Prof.	116	105	107	144	170	195	222	248	266	287	308
Other **	10	21	23	27	32	37	42	47	50	54	58
<u>Low Range</u>											
Total FTE Faculty	204	218	238	294	345	374	398	422	450	477	504
Professor	42	50	53	59	69	74	80	84	90	95	101
Associate Prof.	36	42	55	68	79	86	91	97	104	110	116
Assistant Prof.	116	105	107	141	166	180	191	203	216	229	242
Other **	10	21	23	26	31	34	36	38	40	43	45

* FTE Faculty is based on 16:1 Total FTE Student Enrollments for Years 1972-1979.

** Includes Ranks of Instructor, Associate, Lecturer and Supervisor.

Resource Allocation - Considerations and Procedures

A yearly campus-wide budget review of all administrative units is central to the allocation of resources for non-academic purposes. Units prepare statements indicating their general purposes, functions, and existing staff and budgets. At this time additional resources may be requested with reference to accepted work measures and possible increased benefits. After these statements are reviewed by the Budget Office, the administrative head meets with the Chancellor. Budgetary levels are then agreed upon based on past performance, work load measures, operating reviews including analysis of service priorities and standards of service, and fiscal reviews.

Allocation of academic resources is also performed in a yearly cycle of review and analysis; the opportunity to allocate funds differentially based upon program merit is regarded as a fundamental advantage of the collegiate system. Recruiting and promoting of faculty, allocation of new faculty by area, claims upon faculty time, allocation of monetary resources, and shifting of faculty from one college to another are decisions requiring negotiation between the divisions and colleges. Cases must also ordinarily be made or remade each time a vacancy occurs and reconsidered whenever a first rate candidate proves unavailable.

No set formula applies to the allocation of faculty among colleges, divisions, and disciplinary areas. Considered are college or division needs for a minimum size to be effective, balance by level of appointment, and coverage of important fields of learning. Also considered are work load measures such as number and nature of course offerings, differing requirements for teaching preparation by field, contact hours, administrative contributions, field work

programs, student enrollments by level, and number of majors. Other considerations include service to other academic areas, especially colleges; estimated long-run attraction of students to existing areas; opportunities for excellence in particular fields; availability of quality candidates; need for last-minute flexibility; previous informal commitments; need to hold existing faculty of quality; and research grant requirements.

Negotiations bring Provosts and Vice Chancellors together separately, jointly, and individually. These meetings review campus interests rationally but not mechanically from a wide variety of points of view.

The resource allocation process at the Santa Cruz campus will continue to involve regular review of existing and proposed programs from many points of view, and funds will be differentially allocated to administrative and academic units based upon contribution to overall campus goals.

Faculty Characteristics

Santa Cruz has recruited a faculty which is outstanding both for its academic background and for its commitment to the Santa Cruz plan. Among the faculty in 1969-70 were 11 Alfred P. Sloan Fellows, 10 National Academy of Science Members, 16 Guggenheim Fellows, 11 Fulbright Fellows, 8 American Academy of Arts and Sciences Fellows and 4 Rhodes Scholars. One professor was the recipient of an E. Harris Harbison Award for Gifted Teaching in 1970.

Of a total of 270 regular or acting ranks faculty members at Santa Cruz in 1969-70 (205 FTE), 84% possess or are active candidates for the Ph.D. Of those with doctorates, 49% earned their advanced degree at private universities, 41% at public universities, and 10% earned doctorates at foreign universities.

To meet its research commitments and to maintain a vigorous intellectual atmosphere, the Santa Cruz campus will continue to recruit faculty who are potentially both first rate scholars and outstanding teachers. Activities considered in the promotion of faculty are: teaching, both in Boards of Studies and in Colleges; creative or scholarly work or research; professional activity; and university and public service. The unique features of the Santa Cruz campus appeal to faculty who are willing to cross disciplinary boundaries and who see the advantages of participating in college affairs.

A new procedure for student evaluation of faculty teaching will be put into effect in 1970-71. Student review of teacher evaluations or procedures for recourse of evaluation grievances will be considered as part of the 1975 evaluation of pass-fail grading.

The campus will strive for diversity in the composition of the faculty. Strong efforts will be made to attract qualified women as well as men and women from minority backgrounds.

The campus will strive to recruit a faculty which includes diverse backgrounds and which aims at both outstanding scholarship and distinguished teaching.

Admission Practices and Student Profile

The basic undergraduate admission requirements of the Santa Cruz campus are the same as all campuses of the University of California: freshman applicants from the State of California must normally earn an overall high school average of "B" or greater in "solid subjects"; must submit acceptable scores from the College Entrance Examination Board tests, and complete specified high school courses in history, English, mathematics, laboratory science, and foreign language; junior applicants from California who were not eligible to enter as freshmen must earn a grade-point average of "C+" or better at their previous college. Requirements are higher for out-of-state students.

The Santa Cruz campus, however, receives applications from more qualified students than there are available positions. For fall 1971, for example, 3747 completed freshman applications were received for 1000 openings, and 1623 completed junior applications were received for 425 openings. Limited openings require the application of further admissions criteria.

Transfer students from other UC campuses and from California Community Colleges are given highest priority for undergraduate advanced standing admissions. Veterans receive maximum consideration within the appropriate applicant category. Special attention is given applicants who will experience unusual hardship as a result of redirection.

The admission of non-resident lower division undergraduates is held to 2%. Equal numbers of men and women are admitted. The proportion of EOP Special Action is 2%, and the proportion of other Special Action is 2%. In practice, nearly all of both categories is used for disadvantaged applicants. Applicants are admitted in approximately equal proportions to the areas of Humanities and Fine Arts, Natural Sciences, and Social Sciences. Except in very rare cases, no applicants are admitted as sophomores or seniors.

The American Council of Education Office of Research has recently completed its fifth consecutive survey of entering freshmen students across the country. The statistics, summarized in Appendix III, give an interesting insight into today's college students, their goals and aspirations, attitudes, qualities and characteristics. In brief, as compared to the national norms U.C. Santa Cruz students tend to have higher grades in high school, be younger, have greater aspirations for graduate study, have a greater interest in helping others and giving the disadvantaged preferential treatment, and be more than double in creative aspirations - both through writing and works of art.

There are other indications besides the high number of applications that the undergraduate program is attractive and salutary. The cumulative attrition over the first five years has been low (25%, which may be about half the national average). The campus ranks seventh nationally in terms of per capita awards to seniors in both 1969 and 1970 of the prestigious Woodrow Wilson fellowships for graduate studies (no other California institution scored in the top 25). A high proportion, 55%, of the students go on to graduate school immediately upon graduation (especially notable due to the high percentage of graduating women, 46%), and 79% of those who apply to graduate school are accepted.

Satisfied that it can attract and educate the most able students, the campus now seeks to bring in promising students with disadvantage backgrounds or those who are outstanding in a particular field but whose overall record may be undistinguished. The campus also values a reasonable balance of disciplinary interests among its students.

The campus plans to use financial aids, ingenuity in selection, and the special admissions waiver to achieve a diversity in student interests and backgrounds.

ADVANCED INSTRUCTION AND RESEARCH

Advanced Studies

Graduate enrollment at Santa Cruz currently amounts to about 7% of total enrollment. Although undergraduate instruction will remain predominant steps are being taken to develop a diversified university offering of graduate and professional instruction by the year 2000.

Doctoral degree programs are now offered in ten fields; a one year teacher intern program leads to a credential. Current estimates anticipate graduate and professional enrollment to expand to 20% of total enrollment by the end of the decade.

Expansion of graduate instruction at U.C. Santa Cruz will occur mainly in fields in which supporting programs exist or University-wide need is great. The nature of graduate offerings at U.C. Santa Cruz will be distinctive in concept and will contribute to the overall campus academic program. Their quality will compare favorably with that of other campuses and universities. The current difficulty many recent Ph.D.'s are experiencing in obtaining employment will sharpen the review of manpower needs in proposed areas of expansion.

Advanced instruction and research benefit the campus and society by producing new knowledge, improving undergraduate instructional programs, attracting superior faculty to the campus, training researchers, and creating a local intellectual atmosphere that is stimulating and related to intellectual activities at other campuses and universities.

During the 1970's Santa Cruz will encourage the development of innovative programs and new organizational structures to meet the need for creative approaches to teaching and research in the applied sciences. Starting with the sound programs and faculty already in the colleges and divisions, new applied science courses will be created by a cadre of faculty members from existing disciplines. As this cadre is joined by new faculty members with professional backgrounds, a flexible, interdisciplinary unit called Applied Sciences will add a new dimension to the existing college/divisional structure.

A graduate school of business administration offering a master's degree based on two years of graduate work was proposed in the earlier plan. Before 1980, the need for a graduate school of business or a school of administration will be reviewed. Rapid changes in schools of administration are occurring as

a result of development in computer science, systems analysis, organization theory, behavioral science, and policy analysis. Santa Cruz will strive to develop a distinctive program that takes full advantage of these new developments.

Santa Cruz attracts a high percentage of students interested in teaching, and the number who choose to teach increases during the undergraduate years. Beginning in June 1970 Santa Cruz is offering a graduate elementary and secondary teaching internship program which permits students to earn their State teaching credentials under the "Approved Programs" approach of the State Board of Education. A Master of Arts degree program in Teaching is being discussed; if an M.A. program is developed, supervisory and administrative credentialing programs may come next, followed by a doctoral program in which teachers can continue their education and qualify for more specialized roles. General campus resources will be used to prepare teachers under the direction of a Board of Studies in Education.

Under consideration is a program in human biology whose graduates could continue their education in one of the health science disciplines, including advanced placement in a medical school. Students in this program could also continue graduate study in a biological or behavioral science.

The proportion of graduate and professional students at Santa Cruz will rise during the decade. As a general campus of the university, Santa Cruz will expand into the fields of applied sciences, administration, education, human biology, landscape architecture/town and country planning, environmental studies, linguistics and other fields. New advanced degree programs will also be started in existing areas in the humanities and arts, social sciences, and natural sciences. The next particular areas of expansion will be graduate or professional programs in psychology, information and computer science and teacher education.

Special Features

The graduate and professional programs will be flexible in format, receive students from a broad range of undergraduate institutions, merge in some areas with campus undergraduate programs, and offer interdisciplinary research and undergraduate teaching options. Individualized graduate programs may be offered in some areas.

The campus will strive to see that all Ph.D.'s from Santa Cruz are prepared to be effective teachers. Ph.D. candidates will be given the opportunity to focus on teaching or community involvement as well as research if they so desire. All graduate students will be provided the opportunity to associate with the undergraduate colleges.

The Ph.D. Program at Santa Cruz will seek to offer graduate students opportunities to teach, become involved in the colleges, and perform inter-disciplinary research as well as to conduct research in a particular field.

Research

Support for research at Santa Cruz takes several forms. The Boards of Studies encourage research through teaching schedules that allow time for creative work and writing. Divisions may facilitate research with support funds, and faculty may apply for external support from private or federal sources. Some State funds are available through the Research Committee.

Continued support of research with internal funds is crucial to the success of the campus. Young faculty members rarely have access to external funds for research projects, and many older faculty need funds on a continuing basis for the many small items essential to their work.

As the campus matures and less faculty time is required for the design and planning of academic and administrative policy and structure, the faculty will be able to devote more time to research, including externally sponsored research projects. During fiscal year 1969-70, faculty members at the Santa Cruz campus accepted 57 governmental and private contracts and grants totaling \$1.7 million in value. (See Appendix IV).

Specialized research facilities are or will be present in the central Natural Sciences buildings, Applied Science building (under construction), and Social Science building (proposed).

Research will continue to receive a high priority at Santa Cruz and will be encouraged through the influence of the Academic Divisions and the Boards of Studies, through the use of the available resources of the campus, and through the acceptance of research grants from external sources.

Organized Research

Organized research units at Santa Cruz are unusual in the degree to which many people participating in them also teach. Usually the appointment sets the percent of a researcher's time devoted to teaching; sometimes, especially in the case of college courses, the teaching is voluntary.

The Lick Observatory, an organized research unit with 85 years of achievement, and the Board of Studies in Astronomy and Astrophysics are closely linked. The work of the Observatory involves graduate students and faculty, and the output of the Observatory directly benefits the instructional program in Astronomy. An expansion in theoretical astrophysics is supported by a large grant from the National Science Foundation.

Decline of the effectiveness of Mt. Hamilton as a dark-sky site, owing to the growth of San Jose, has led to a need for a medium-sized telescope at a new dark-sky site for Lick Observatory. A joint project at Junipero Serra Peak, south of Monterey, has been partially funded by the Regents of the University of California and the University of Wisconsin, but will require a large external grant to proceed.

Conferences sponsored by the Center for South Pacific Studies at Santa Cruz have given the campus early recognition in the area of Pacific Studies.

Possible future roles for the Center include: a clearing house for programs elsewhere, the focus of Pacific scholars in the University of California system, a multidisciplinary research/instruction group, and a sponsor of conferences and academic interchanges with South Pacific universities.

The continuing success of the Lick Observatory and the Center for South Pacific Studies requires University support.

Future Organized Research

Of first importance in starting new organized research units at the Santa Cruz campus will be the ideas and energies of existing and available faculty. Preliminary plans already exist in several areas and are awaiting the necessary funds.

A center or disciplinary laboratory for Marine Studies at Santa Cruz has high priority for the near future. Such a center or laboratory will take advantage of the expertise of existing faculty and the possibilities offered by the location of the campus itself. A Marine Studies laboratory at Santa Cruz will complement rather than compete with other University of California programs in ocean sciences. It will focus on the oceanic mammals, that already have been studied extensively on Ano Nuevo Island, and on the continental shelf in the Monterey Bay and the coastal waters between Point Sur and Half Moon Bay. Such studies will have direct relevance to problems of waste disposal, food production, and water supply.

A Center for Marine Studies has been approved by the Chancellor and was presented to the Coordinating Council for Higher Education in 1968. A revised proposal is being prepared.

A grant from the President has been made for \$13,250 for each of five years for the planning of a Natural Resources Center. This effort is being conducted in conjunction with the Environmental Studies Program.

Other possible research centers or disciplinary laboratories include linguistics, and landscape architecture and planning.

Plans for future organized research units of disciplinary laboratories include the areas of marine studies, environmental studies, linguistics, and landscape architecture/town and country planning

The University Library

The Library is meant to be the intellectual center of the Santa Cruz campus. To play this role it strives to provide a fundamental research collection of the most significant and continually useful material in each subject field. The plans of the Library program include easier access to the centralized collection via widely-distributed catalogs and possibly electronic display devices, emphasis on orderly development of the collections, better relations with other Bay Area libraries, greater faculty involvement in library affairs, investigation of technical innovations including facsimile transmission systems, improved reference services, upgrading of professional staff, and increased ratio of non-professional to professional staff.

The UCSC Library has been in the forefront of computerized library catalog development through the latter half of the past decade. It has created the largest known body of machine-readable cataloging data in the United States and has produced from this data-base printed catalogs, in multiple copies for distribution to the colleges and other campus units, and has shared this data with the Institute of Library Research for projects of University-wide import. The relatively small Santa Cruz Library is playing an important role as "laboratory" for larger developmental programs in library automation.

Possible policy innovations include assigning librarians to Board of Studies planning groups, inter-relation of college libraries, provision of library development services to the college libraries, and shifting of responsibilities for some services such as instructional aids to other support units.

By 1980, under existing formulae, the Library collection may grow from about 300,000 volumes to about 1,000,000 volumes. Added physical facilities will include two major additions to the central unit but no additional branch libraries. A temporary closed-stack book storage area is planned in the Applied Sciences building to accommodate collection growth after Library Unit I is filled and before Unit II becomes a reality.

The Library will continue to grow and innovate as the intellectual center of the campus.

SUPPORTING SERVICES

Continuing Education and Public Service

The Santa Cruz campus strives to provide service to many persons, groups, and communities not directly participating in the regular programs of instruction and research. The goals of University Extension at Santa Cruz, an important avenue of public service, include: (1) assisting workers in many fields to stay abreast of new developments and upgrade their abilities; (2) providing opportunities for students whose situations are different from those of typical undergraduate or graduate students to progress toward comparable goals; (3) informing the public of implications of social change which require collective action; (4) helping the disadvantaged members of society learn ways of extricating themselves from the bonds of poverty; and (5) aiding those who would develop a cultural awareness.

University Extension serves part-time students. In 1969-70 at the Santa Cruz Division of University Extension there were about 8600 registrations, the equivalent of 455 full time students; University Extension at Santa Cruz is thus similar in size to a small Santa Cruz college. The necessity to be self-supporting will restrain the growth of University Extension over the decade.

The purposes of Summer Session at the Santa Cruz campus include the provision of educational opportunities for full and part-time students progressing towards a degree or who wish to study areas outside their field of concentration. Likely future program innovations include links with a college and University

Extension as well as the addition of programs that utilize the Santa Cruz location. Summer Session is limited by the necessity to be self-supporting.

The Santa Cruz campus offers the public a regular program of lectures, films, and art showings. In addition there are performances by the orchestra, chorus, Crown Chamber Players, and the University Theater Company. The Garden Project also attracts interest as a unique student activity.

The self-supporting Summer Language Program offers students from many colleges and universities an opportunity to complete a year's work in a language in one summer. Additional public service is provided by faculty and staff contributions to professional associations and civic groups.

The Santa Cruz campus will continue to provide public service through the programs of University Extension, Summer Session, and Summer Language Program and through cultural activities on-campus and faculty and student contributions off-campus.

Health Services

The health center promotes preventive health care and provides out-patient and in-patient services for students. The center makes provision for emergencies, maintains health records, and promotes environmental health and safety. The health center also offers psychiatric services to students.

The campus provides psychological counseling for students through a half-time counselor located in each college. These Counseling Psychologists also provide aid to staff who are in helping roles on campus, and they work to establish a campus climate favorable to growth and development.

The Santa Cruz campus will continue to provide health services, including psychological counseling and short-term psychiatric help at a level commensurate with the needs of young people.

Sports and Recreation

The intention at Santa Cruz is to develop a physical education program of an open nature in which students, faculty, and staff come together and participate. As a consequence, emphasis is placed on optional (no credit) courses useful for life-time leisure and conditioning as well as for a release from the tensions of academic life. Programs of intramural sports and physical recreation are also open to all members of the campus community.

Although there is already an active program of physical education and recreation in existence, a serious obstacle to its further growth has arisen. The enrollment in 1969-70 was sufficient to saturate completely the limited facilities available (one small gymnasium, one very small swimming pool, four tennis courts, inadequate locker and shower facilities, and a medium sized field); unless extensive new facilities become available in the immediate future, only a fraction of interested students and faculty can be served.

The extramural sports program is based on a strictly play-for-fun approach: no separate "Athletic Department", no admission charges, no athletic scholarships, no recruiting, no full-time coaches. Twelve different sports clubs compete extramurally. Again, however, the lack of adequate facilities places this popular program under a severe handicap.

Over the decade the campus will continue its low key sports program and will strive to improve and to increase the athletic and physical education facilities, which are presently inadequate.

Educational Opportunity Program

The Educational Opportunity Program at Santa Cruz provides opportunities for people who have the potential to benefit from higher education but who lack the financial means to develop that potential. Recruitment is carried out both in high schools and junior colleges primarily in a largely rural seven county area including portions of the Central Valley.

Personal interviews and recommendations receive special weighing in the EOP admission process. Language barriers, cultural milieu, economic privation, and other such identifiable factors are considered as legitimate reasons why a student has not performed as well as his more affluent classmates.

The Educational Opportunity Program provides EOP students special orientation and counseling services, coordinates the efforts of tutors, and helps students in job placement and housing. The academic achievements of the EOP students are closely comparable to those of the other students. The campus continues to seek adequate financial support for the EOP program.

The campus is committed to the Educational Opportunity Program and considers itself significantly enriched by the presence of able students from a broad range of backgrounds and experiences.

Other Services

Over the first five years, the campus built up exceptional facilities and an able staff in both audio-visual and closed-circuit television. The colleges are being wired and tied to the cable as rapidly as finances permit. Within a year or two it should be feasible to use televised lectures to reach students in all colleges and classrooms.

Three facilities for remote instruction using audio tapes are now in use. As many as 100 students at a time dial into one of 30 channels to hear lectures, symphonies, and language instruction. The growing library of tapes represent a significant experiment with programmed learning and is expected to continue to grow in use.

Closer collaboration with the faculty for a more effective utilization of these facilities and for the improvement of instruction is being fostered by a recently appointed Senate advisory committee. The increased student/faculty

ratio and recent encouragement of faculty to include evidence of teaching effectiveness and innovation in their cases for promotion will also encourage faculty use of Instructional Services facilities over the decade. College 8 may especially use instructional aids to free courses from traditional time and space limitations and as part of an emphasis on small groupings of students.

The campus looks forward to wider and more innovative use of instructional aids.

RECAPITULATION

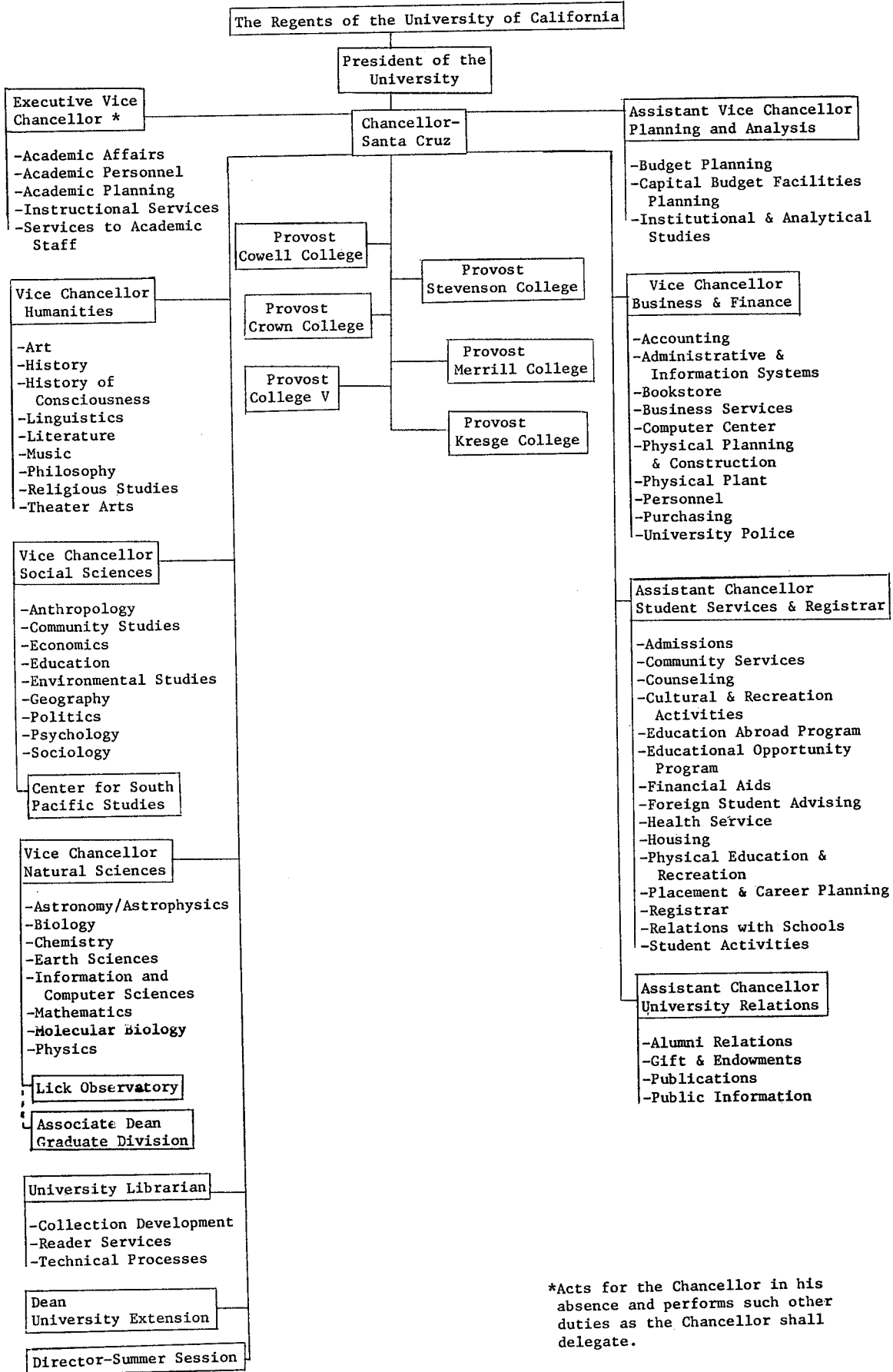
The directions set for the campus in the Academic Plan for 1965-70 are restated and amplified in this revision. During the next decade the campus will continue to grow principally by the addition of colleges and will remain primarily an undergraduate liberal arts campus. Standards of high quality will remain for both students and faculty. An unweighted student/faculty ratio of 16 to 1 remains a goal, but is threatened by increasingly tight budgets.

Over the decade the collegiate system will diversify considerably as the existing colleges evolve and new models for colleges are used. Academic innovation is expected due to the flexible structure of boards of studies and colleges. The graduate and professional programs will grow modestly.

The campus faces problems caused by inadequate instructional and athletic facilities and reduced occupancy of on-campus residences. The encouragement of quality research will require continuing attention, as will the determination of a proper balance between central and college administration.

Many of the hopes for the Santa Cruz campus have begun to be realized, although during the coming years the process of academic innovation and the concern for quality will require vigorous defense against the influences of size and tradition. Mainly because of its colleges, the campus is noticeably different from other campuses, and it plans to continue to develop a unique style and structure. The campus will not be made over or begun again in the next decade, but it will continue to evolve and change in its efforts to provide the State of California with higher educational services of quality and distinction.

University of California, Santa Cruz
ADMINISTRATIVE ORGANIZATION



*Acts for the Chancellor in his absence and performs such other duties as the Chancellor shall delegate.

Appendix II:

I. STUDENTS BY NUMBERS, LEVELS AND DIVISIONS -- HIGH RANGE

	1969-70	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Total Headcount	3092	3697	4117	4955	5850	6750	7650	8550	9200	9900	10,600
Level and College											
Lower Division	1476	1693	1868	2054	2288	2478	2620	2900	3040	3200	3360
Upper Division	1462	1739	1924	2411	2912	3422	3930	4350	4560	4800	5040
Undergraduates	2938	3432	3792	4465	5200	5900	6550	7250	7600	8000	8400
College Growth	I 600	662	720	VI 373	VII 300	VIII 400	IX 300	X 350	XI 350	XII 400	XII 400
	II 700	765	770	VII 300	VIII 435	IX 300	X 350	XI 350			
	III 525	610	590								
	IV 600	665	615								
	V 500	730	820								
			VI 277								
Graduate I	84	175	201	294	390	510	660	780	960	1140	1320
Graduate II	70	90	124	196	260	340	440	520	640	760	880
Total Graduates	154	265	325	490	650	850	1100	1300	1600	1900	2200
FTE Instructional Load by Division											
Natural Sciences	728	881	1012	1192	1449	1669	1907	2156	2352	2550	2753
Social Sciences	849	1010	1147	1363	1704	2008	2304	2580	2798	3037	3276
Humanities	1457	1727	1921	2210	2689	3074	3443	3800	4062	4354	4644
Professions	69	122	92	109	135	172	232	299	356	409	461
Majors by Division											
Natural Sciences	898	1072	1194	1565	1816	2064	2326	2614	2826	3042	3262
Social Sciences	1123	1368	1523	1616	1942	2271	2578	2878	3091	3325	3560
Humanities	1071	1257	1400	1774	2092	2399	2692	2957	3138	3351	3560
Professions						16	54	101	145	182	218

STUDENTS BY NUMBERS, LEVELS AND DIVISIONS -- LOW RANGE

	1969-70	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Total Headcount	3092	3697	4117	4865	5700	6200	6600	7000	7450	7900	8350
Level and College											
Lower Division	1476	1693	1868	2054	2288	2352	2360	2480	2620	2760	2900
Upper Division	1462	1739	1924	2411	2912	3248	3540	3720	3930	4140	4350
Undergraduates	2938	3432	3792	4465	5200	5600	5900	6200	6550	6900	7250
College Growth	I 600	662	720	VI 373	VII 300	VIII 400	IX 300	IX 300	X 350	X 350	XI 350
	II 700	765	770	VII 300	VIII 435						
	III 525	610	590								
	IV 600	665	615								
	V 500	730	820								
			VI 277								
Graduate I	84	175	201	240	300	360	420	480	540	600	660
Graduate II	70	90	124	160	200	240	280	320	360	400	440
Total Graduates	154	265	325	400	500	600	700	800	900	1000	1100
FTE Instructional Load by Division											
Natural Sciences	728	881	1012	1205	1402	1520	1627	1745	1875	1996	2120
Social Sciences	849	1010	1147	1378	1649	1828	1965	2089	2231	2377	2524
Humanities	1457	1727	1921	2235	2602	2799	2937	3077	3238	3409	3578
Professions	69	122	92	110	130	157	198	242	283	320	355
Majors by Divisions											
Natural Sciences	898	1072	1194	1536	1770	1896	2007	2141	2289	2428	2570
Social Sciences	1123	1368	1523	1586	1892	2086	2225	2356	2503	2653	2804
Humanities	1071	1257	1400	1743	2038	2203	2322	2420	2541	2674	2804
Professions						15	46	83	117	145	172

II. FTE FACULTY BY RANK*

<u>High Range</u>											
Total FTE Faculty	204	218	238	300	354	408	462	517	554	599	641
Professor	42	50	53	60	70	82	92	103	111	120	128
Associate Prof	36	42	55	69	82	94	106	119	127	138	147
Assistant Prof	116	105	107	144	170	195	222	248	266	287	308
Other**	10	21	23	27	32	37	42	47	50	54	58
<u>Low Range</u>											
Total FTE Faculty	204	218	238	294	345	374	398	422	450	477	504
Professor	42	50	53	59	69	74	80	84	90	95	101
Associate Prof	36	42	55	68	79	86	91	97	104	110	116
Assistant Prof	116	105	107	141	166	180	191	203	216	229	242
Other**	10	21	23	26	31	34	36	38	40	43	45

* FTE Faculty is based on 16:1 Total FTE Student Enrollments for Years 1972-1979.

** Includes Ranks of Instructor, Associate, Lecturer and Supervisor.

Appendix III: Results of American Council of Education Office of Research
Survey of Entering Freshmen

This year's results for Santa Cruz compared with 1966, 1967, 1968, and 1969 as well as the current national norms are as follows:

	<u>UCSC</u> <u>1966</u>	<u>UCSC</u> <u>1967</u>	<u>UCSC</u> <u>1968</u>	<u>UCSC</u> <u>1969</u>	<u>UCSC</u> <u>1970</u>	<u>NATL. NORM</u> <u>1970</u>
Average high school grade						
A+, A or A-	-	63.3%	56.2%	53.6%	59.5%	24.3%
Age 19 or older	8.6	4.6	8.7	8.6	6.9	13.9
Had original writing published	33.2	33.0	34.3	30.1	31.4	19.8
Scholastic Honor Society	86.5	85.9	76.7	73.7	73.7	39.2

Ambitions and career expectations data reveal the following items where the UCSC percentages were significantly different from the national norms:

Bachelors degree highest planned	16.0	13.5	17.3	14.4	17.3	35.6
Masters degree highest planned	34.3	39.3	35.9	39.8	33.7	33.0
Doctors degree highest planned	41.7	42.1	43.4	42.2	43.7	27.7

Objectives considered to be essential or very important included:

Be an authority in my field	63.5	62.3	46.6	47.7	51.7	67.9
Be very well-off financially	24.0	21.1	14.5	13.8	10.2	36.6
Help others in difficulty	68.4	65.9	70.1	74.1	74.4	63.9
Write original works	36.8	37.6	36.3	35.6	40.5	16.5
Create works of art	28.1	32.9	29.9	37.6	45.6	17.6
Succeed in my own business	23.4	16.3	12.0	14.1	13.7	42.4

Agree stongly or somewhat:

Benefit of college is monetary	14.0	-	15.0	13.5	15.4	57.8
Give disadvantaged preferential treatment	-	-	55.3	60.1	64.3	39.3

Characteristics of Santa Cruz entering freshmen have changed some since 1966. The proportion of students with "A" averages or scholastic honors has been reduced as the campus has sought a more balanced student body. The proportion desiring to be an authority in a field has also declined.

Appendix IV: Major Grants and Benefactions

Benefactions to the Santa Cruz campus now total over \$5.9 million dollars. Extramural support for research has averaged an additional \$1.5 million dollars per year over the last three years.

Major Gifts to U.C. Santa Cruz, 1962-71:

<u>Donor</u>	<u>Purpose</u>	<u>Total Amount</u>
S.H. Cowell Foundation	For Cowell College and Cowell Student Health Center	\$2,017,000
Charles E. Merrill Trust	For Merrill College	650,000
The Kresge Foundation	For Kresge College	650,000
The Crown Zellerbach Foundation	For Crown College	500,000
Allstate Foundation	Computers	322,600
Ford Foundation	Fellowships, research, innovation in the colleges	290,386
The Danforth Foundation	Support personal dimensions of colleges and teaching internships for graduate students	215,375
The Carnegie Corporation of New York	To develop an undergraduate program in the arts	100,000
Barbara Sesnon Cartan	Scholarships and for College V	94,699
Johnson Estate	Scholarship fund	91,606
Various donors	For Stevenson College library	90,053
The Alfred P. Sloan Foundation	Research fellowships and symposium	73,405
Anonymous	Educational outreach	52,531
Frank Schwabacher Memorial Scholarship Fund	Scholarships	42,128
Norman and Charlotte Strouse	Library collection of Thomas Carlyle	39,395
Robert Heinlein	Heinlein collection	30,230
Alfred Hahn	(Deferred)	30,000

Appendix IV: (Continued)

Major extramural support for research at U.C. Santa Cruz, 1967-70, by year in which grant was made.

<u>Foundation</u>	<u>Year: 1967-68</u>	<u>1968-69</u>	<u>1969-70</u>
National Science Foundation	426,450	1,344,318	807,247
HEW National Institutes of Health	161,148	107,646	236,929
National Aeronautics and Space Administration	153,734	231,271	167,817
HEW Office of Education	-	11,014	113,898
Ford Foundation	-	-	58,593
Office of Naval Research	-	49,864	54,865
American Heart Association	-	-	44,000
Air Force Office of Scientific Research	-	29,042	41,889
Department of Interior, Bureau of Indian Affairs	-	-	34,000
Research Corporation (a foundation)	-	-	30,434
Atomic Energy Commission	-	-	30,000
American Chemical Society	34,358	103,500	2,300

