Rethinking the Dream at Santa Cruz

Facing an enrollment crisis, this new University of California campus sweeps away some structural innovations of its cluster-college system

Santa Cruz, California. When the University of California at Santa Cruz (UCSC) opened some 15 years ago, it was heralded as an ambitious experiment at creating a superb program of undergraduate education in a university environment that would be known for its research and graduate training too. Santa Cruz was, in a word, to offer the best of two worlds, Swarthmore and Berkeley.

This year the salient organizational features of the UCSC cluster-college system have been largely abandoned, and most—though not all—of the faculty are saying good riddance as Santa Cruz has moved to embrace a more traditional way of doing things. Because of the way the campus, which now has about 6000 students, is broken up into eight village-like colleges nestled among redwood-covered hills overlooking Monterey Bay, Santa Cruz will continue to have some distinctive and attractive features. But, in the main, the Santa Cruz experiment appears to be over.

The essence of the experiment was that every faculty member was supposed to owe allegiance to one of the colleges as well as to an academic department or "board of studies," as the departments are known here. To give this expectation of dual loyalty substance and reality, the colleges and their provosts were to have a substantial voice in the hiring of faculty and in decisions on the granting of tenure and promotions.

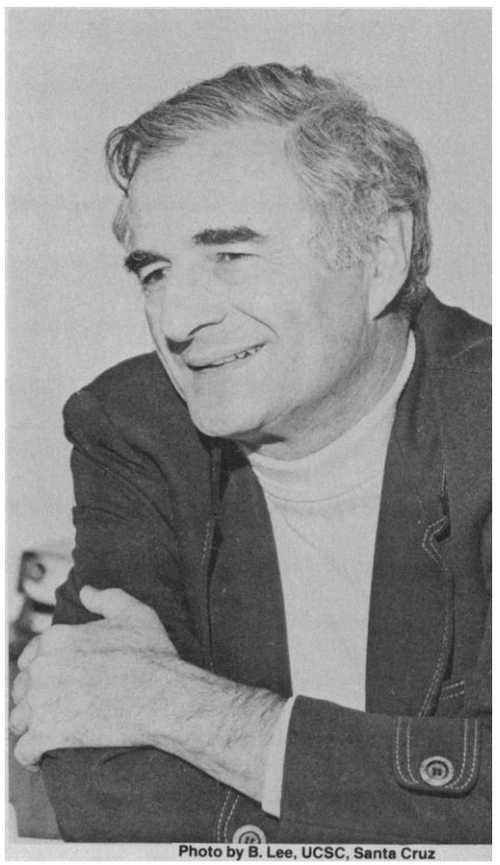
The faculty members or fellows assigned to each college were expected to work together across disciplinary lines to develop and carry out strong programs of general education—this in addition to teaching courses for their boards of studies and doing research. All of these features of the Santa Cruz experiment have now been swept away in six of the eight colleges. An exception has been made for the other two colleges because of special circumstances there.

Plans to end the colleges' responsibility for curriculum planning and the hiring and promotion of faculty were developed by Chancellor Robert L. Sinsheimer in late 1978 in consultation with faculty committees. These plans were approved in principle by the Academic Senate last spring with only a small minority dissenting. "The [changes] have been accepted by 75 to 80 percent of the faculty, and that's about as good as you could expect," says Sinsheimer, who chaired the division of biology at the California Institute of Technology before coming to UCSC in 1977. "The minority," he adds, "is made up mostly of people in the first two colleges, Cowell and Stevenson, who came here with a certain dream or vision, and even to modify the system is hard for them to take."

For some years a consensus seems to have been emerging in the UCSC faculty that the system of dual roles and allegiances was simply not working. In the early years, the colleges exerted a strong influence in faculty hiring and promotion decisions; in a number of cases where a college and one of the disciplinary board of studies disagreed over whether to grant tenure, the college prevailed. But, as time went by, the power of the boards grew to such an extent that the work of college committees on tenure was increasingly viewed as a charade and waste of time.

Also, faculty interest and participation in the development and teaching of general education "core" courses in the colleges gradually diminished, and during the last academic year only two such courses were still being offered. The colleges were, however, offering a number of other special courses, including some interdisciplinary ones. The popular "Culture and Technology" course given at Crown College by physicist Joel R. Primack and anthropologist Triloki N. Pandey a few years ago is a good example of such offerings. But Sinsheimer and some members of the faculty felt that, if the academic divisions for the natural and social sciences and the humanities provided effective leadership, there could be even more such courses and interdisciplinary majors than in the past.

According to Michael Cowan, a professor of literature and chairman of the Academic Senate, the "proximate" cause of the move last year to initiate sweeping changes in the college system was the fact that, for the second straight year, student enrollment had dropped slightly. The number of entering students was down and attrition of students already enrolled had reached an alarming rate, with less than half of the students entering Santa Cruz actually graduating.



Robert L. Sinsheimer

Unless Santa Cruz could reverse the trend and start attracting and retaining more students, it faced the prospect of a devastating loss of faculty positions. Even then, Santa Cruz stood to lose some 30 faculty positions should the University of California system hold it to the faculty-student ratio of 18 to 1 that generally applies at UC campuses. As a relatively new campus, Santa Cruz might expect a few more years of grace, but it was felt that the time had come to take strong action—and, indeed, President

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Cowell and Stevenson, the first colleges established at Santa Cruz, are in the foreground of this aerial view of part of the UCSC campus. Two of the other six colleges, Merrill and Crown, can be seen in the background, on the hill. The colleges have from 600 to 800 students in residence. [UCSC photo]

David Saxon of the UC system was soon to indicate that the ax would fall in 1983 if the prescribed 18 to 1 ratio were still not met by that time.

Sinsheimer has seen the overhauling of the college system as one way of ending what he has called the "stagnation and drift" that results from episodic and divided leadership. In a statement to the faculty this past September, he observed: "The absence of a functional structure coupled with stress on being different that encouraged each [faculty] member to pull his or her own way effectively locked the campus into a state of dynamic immobility—contending interests cancelling each other and splintering efforts to form the consensus necessary to move the institution forward." Now that the role of the colleges has been reduced, Sinsheimer expects the three academic divisions and the boards of studies to take the lead in developing programs that will attract more students. The changes in the college system may have had a symbolic as well as functional significance, for, as Cowan sees it, Sinsheimer has wanted to show David Saxon and the UC Board of Regents that Santa Cruz is now capable of "dramatic action" to move things foward.

Originally, UCSC was expected to continue growing in modular fashion, adding some 600 to 800 students with the establishment of each new college, until its enrollment reached over 27,000 students by the end of the century. Moreover, Santa Cruz was to offer professional programs in fields such as engineering, business, forestry, and landscape architecture and thus attract students over a broader spectrum than any cluster of liberal arts colleges could hope to. But, then, because of a downturn in projected enrollments for the UC system as a whole, the Board of Regents decided to cancel plans for the professional programs at UCSC.

In Sinsheimer's view, this decision has long since proved to have been a bad mistake. With the coming of the 1970's and a shift in student preferences away from liberal arts to professional programs, Santa Cruz lost its initial popularity and failed to attract enough students to ensure even a modest rate of growth, much less the rapid growth originally envisioned.

Gerald Grant, a sociologist at Syracuse University who has coauthored with David Riesman of Harvard a book on experiments in higher education,* regards the abandonment of plans for the professional programs as the undoing of the Santa Cruz dream. Because of this, he believes, Santa Cruz came to have, by the early 1970's, a disproportionate number of bright but directionless students who gave the student body a laid-back, grooving on the beach, downwardly mobile image. Thus far to shake this image has been hard despite the fact that it can be said to be plainly overdrawn, especially in light of the success of Santa Cruz graduates in gaining admission to top-flight graduate and professional schools.

Freshman enrollment began declining in 1972, and this was a clear sign of trouble even though total enrollment continued to grow for several more years because of students transferring to Santa Cruz. In the opinion of Dean McHenry, who retired as UCSC's first chancellor in 1973, the colleges were not doing the job expected of them. "Many have failed utterly to achieve the vision of the fraternity writ large," he told *Science*, and for this he finds himself partly to blame.

He says he erred in assigning certain responsibilities to the colleges, such as for the counseling of students and the development and teaching of core courses, but in then failing to require that the assignments be properly carried out. Actually, McHenry, whom Grant admires as a "closet Utopian" tough and shrewd enough to be an ideal founding chancellor, left the scene through retirement at the time drastic changes perhaps should have been undertaken.

His successor, Mark Christianson, a geologist who had been a vice chancellor at Berkeley, arrived in 1974 but lasted only 18 months; better at opening issues for discussion than at bringing them to a decision, Christianson was asked to resign by the faculty and the college provost. Christianson was followed by Angus Taylor, formerly provost of the University of California system, who, nearing retirement when he arrived at Santa Cruz, served a year and a half in a caretaker status until Sinsheimer was appointed.

What is now left from the Santa Cruz experiment? Oakes College, which takes as its theme "cultural pluralism and the ethnic experience in the United States," is one of the two colleges not covered by the recent changes, and, in its case, the exception may be highly significant—if it lasts. The provost, J. Herman Blake, a black sociologist often described as dynamic and charismatic, has been successful in getting foundation grants for his college as a semi-autonomous academic unit vested with the powers and perquisites formerly enjoyed by all of the colleges. For UCSC now to downgrade the status of the provost and his college would be awkward to say the least. Also, part of the Oakes mission is to help disadvantaged students find their way in a demanding academic environment; its

**The Perpetual Dream: Reform and Experiment in the American College* (University of Chicago Press, Chicago, 1978).

student support services include, for example, a comprehensive tutorial program in mathematics and science. Sinsheimer wants to avoid taking any action that might be disruptive of such efforts.

In its cluster of colleges Santa Cruz still has, of course, a system of physically separate and architecturally distinct student living units—units now often compared to the "houses" at Harvard. The provosts live at the colleges; all faculty members except those in the natural sciences and a few in the social sciences have their offices in the particular colleges at which they are fellows; and most courses are taught in classrooms in the colleges.

A lot of informal interaction between faculty and students takes place, with professors often having lunch at the colleges' cafeterias and restaurants (there is no faculty club) and sometimes even holding office hours in the college coffee house. Also, many professors attend the special dinners and evening entertainments regularly scheduled at the colleges. For instance, just as at Harvard's Lowell House, "science table" is held at Crown and Oakes colleges one night each week to allow a fellow or an outside guest to describe his or her research.

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One controversial part of Sinsheimer's plan to change the college system has proved less rigid than many faculty people had feared. Faculty members were expected by and large to regroup along broad disciplinary lines; for example, professors in the humanities were to become fellows at Kresge and Cowell colleges, those in the social sciences were to go to Merrill College, and those in the natural sciences were to go to Crown. But, as things have worked out, there continues to be a considerable mixing of disciplines at all colleges.

The Santa Cruz policy of giving most students "narrative evaluations" instead of letter grades is perhaps the most notable innovation surviving here from the 1960's. This policy is much favored by students; and, in science courses where students can elect to receive letter grades, only a small minority do so. But the Academic Senate, apparently believing that the narrative evaluation system is too often viewed as an indication that UCSC is soft and undemanding, last year voted to give all students the letter grade option. Although this action was reversed after students raised a protest, the issue is by no means dead.

To refurbish its image, Santa Cruz has recruited as its admissions officer Richard Moll, who has been in charge of admissions at Vassar during its transition from an elite women's college to a coeducational institution. Moll will not make the move from Vassar until July, but, as a consultant to UCSC, he already is shaping a strategy for increasing Santa Cruz's appeal to able secondary school students in California and across the country. His theme is pretty much the one that UCSC began with—that Santa Cruz "combines a segment of a superb state university system and the trappings of the greatly desired small private college."

"I think that will sell," Moll told *Science*. "Santa Cruz should be able to compete not only with Berkeley, Santa Barbara, and Davis, but also be an arch rival in public perception with Pomona, Swarthmore, Oberlin, and Vassar."

Sinsheimer wants Santa Cruz to compensate, as best it can, for the absence of professional schools by offering work in such things as applied economics, "computer literacy," and environmental toxicology. Some professors are leary and suspicious of such moves toward vocationalism, but the faculty is expected to go along with the new chancellor in light of the enrollment crisis. Enrollment picked up somewhat this past fall but only because some 200 students who were denied admission to Berkeley for lack of space there were admitted here, but with a right to transfer to Berkeley as juniors.

Despite all the recent changes and the talk of new directions and a new image, UCSC appears still not to have resolved a fundamental question which, though inherent in the Santa Cruz idea, seems never to have been squarely confronted. The question is whether UCSC should not deliberately embrace a policy of trading off some productivity in research in favor of making a stronger effort in undergraduate education. Santa Cruz seems to have been schizophrenic about this from the beginning, as evidenced by the tension between the colleges and the boards of studies.

Moreover, the duality of obligation and commitment to the colleges and boards of studies that was supposed to be shared by the entire faculty has in actual practice rested especially heavily on younger, untenured faculty people. In

(Continued on page 162)

Supporting Hospice Care

The hospice movement has grown apace in this country over the past couple of years, so far without much help from health insurance, which provides erratic coverage for the type of manpower-intensive services hospices have to offer and very little encouragement for home-based care, the hospice ideal.

Now the Health Care Financing Administration of HEW has announced a 2-year demonstration project, starting around April, in which Medicare and Medicaid patients at 26 hospices around the country will have all expenses paid. The 26 were selected from 236 applicants and represent all the hospice models extant. Nine are home care services with no inpatient component; the others are hospital-based or freestanding.

Medicare and Medicaid currently do not reimburse outpatients for the costs of drugs, and the types of home care services that are reimbursable are sharply circumscribed. Although the details of services to be covered are yet to be worked out, the demonstration program is supposed to cover a wider range of inpatient services as well as home care visits for housekeeping and counseling, including "bereavement counseling" for families of patients after they die.

HEW is currently preparing a Request for Proposal for an independent evaluation of the costs and utilization of the program and is working with the Robert Wood Johnson Foundation to evaluate the quality of care and quality of life of the patients in the program.

Inpatient care for hospice patients is often at least as expensive as inpatient hospital care, because the cost of the intense personal attention required makes up for the money saved in high-technology therapies. But the government hopes that the project will show net savings by making it possible for patients who would otherwise have to be institutionalized to live out their last days at home.

The hospice concept poses a challenge for insurance companies because it cuts across the medical and social service models. Many of the activities of hospices are housekeeping-type chores performed for patients and their families by volunteers, and it

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the case of the tenured faculty, some entered into teaching and counseling in the colleges with enthusiasm; but for others, their sense of commitment to the work of the colleges was either largely absent from the outset or was not long sustained.

According to Lynda Goff, an assistant professor of biology, tenure is harder to come by at Santa Cruz than at other University of California campuses. She says (and others agree) that, while candidates for tenure are held to the same standards of scholarly achievement that apply elsewhere, they are expected to bear a substantially heavier burden of teaching and counseling students. The Santa Cruz ideal of a campus that combines the excellence of Berkeley and of Swarthmore cannot be realized, she indicates, without more faculty. "The college idea is a great one, but we didn't have the resources to pull it off," she told *Science*.

UCSC will not be given resources greater than what other University of California campuses receive, nor has such a favored status for this campus ever been contemplated. Thus, if it is to rival the likes of Pomona and Swarthmore, Santa Cruz may have to redefine its standards and expectations for faculty performance with such models—rather than the high-powered research institutions—as the guiding influence.

—LUTHER J. CARTER

Justice, EPA Begin Hazardous Wastes Drive

The U.S. Environmental Protection Agency (EPA) and the Department of Justice last month began their long-expected drive to combat what Assistant Attorney General James W. Moorman termed "the threat posed by hazardous chemical dump sites." The drive started with the filing of four suits against Hooker Chemical Corporation and Olin Corporation, charging them with violating federal laws and endangering human health and the environment at four sites in Niagara Falls, New York. The suits seek nearly $68 million from Hooker for cleanup at three of the sites and $50 million from Hooker and Olin for cleanup of the fourth site. Another $7 million is sought from Hooker for reimbursement of federal funds already used to clean up the Love Canal area.

The $125 million total of the four suits makes this the largest environmental protection action ever filed, but it is just the opening salvo in a larger war. Moorman and EPA deputy administrator Barbara Blum announced at the same time that the two agencies are forming "a strike force against hazardous waste pollution" and that they expect to file another 50 such suits in 1980 alone.

None of the four sites is currently used as a disposal area, but the two companies disposed of more than 265,000 tons of wastes there between 1942 and 1975. The Love Canal site gained national attention in 1978 when the residents of 235 homes surrounding the site had to be evacuated because the chemicals were leaking into their basements (*Science*, 25 May 1979, p. 820). Chemicals from another site, known as the "S" Area landfill, have spread to the nearby Niagara Falls water treatment plant and have infiltrated it, posing a threat to the city's water supply—although tests conducted in November show that the chemicals are not yet in a high enough concentration in the water to be a "present hazard." Wastes stored in the Hyde Park site have been leaking into the appropriately named Bloody Run Creek, from which they are carried to the Niagara River. Dioxin, which is extremely toxic, has been found in the creek in high concentrations, and workers and residents in the area have complained of noxious fumes coming from the dump. Chemicals buried in the 102nd Street dump are also seeping into the Niagara River, and children playing on the "field" covering the site have been burned by chemicals exploding on its surface.

The suits ask the court to order the immediate cleanup of the sites. This would include construction of special walls to contain the chemicals in the ground and installation of water and air monitoring systems. Bloody Run Creek would be diverted temporarily so that its bed could be cleaned. The government also wants the court to require Hooker to pay for complete medical studies of all families in the Love Canal and Hyde Park areas to determine whether their health had been impaired, and to pay for a program to monitor the health of past and present residents and their immediate offspring for the rest of their lives.

Furthermore, Hooker would be required to purchase all the affected homes in the Love Canal area or to pay for the temporary relocation of affected residents until all environmental indicators show that chemical contamination has been reduced to the "normal levels found in nearby unaffected areas." It seems very unlikely, though, that anyone will want to move back into most of the houses.

The action came only 2 days after Justice and the state of California filed a similar suit charging a Hooker subsidiary, Occidental Chemical Company, with disposing hazardous wastes in ponds, ditches, and other areas on the property of the company's plant in Lathrop, California. That suit charges that the wastes have percolated into the groundwater serving the drinking water wells of Lathrop, a town of 3000 in the San Joaquin Valley. The cost of cleanup in Lathrop is expected to total about $5 million. Hooker is also the subject of at least two suits brought by the state of Michigan last year because of the company's disposal practices there.

Hooker president Donald F. Bader, in a prepared statement, said that the suits are "unwarranted and will be vigorously resisted." The company attributes most of the problems at the Love Canal site to construction activities carried out after the site had been deeded to the city. "Except for the incident of the children" who were burned by explosions, he says, "it has been proven that not a single person has been injured by the company's practices at any of these former waste disposal sites. . . . Hooker is taking every precaution."

Hooker's waste disposal practices are not significantly different from those of other chemical companies. The large number of suits it now faces is probably a reflection more of the bad publicity engendered by the Love Canal incident than of the quality of its practices. The forthcoming round of suits seem certain to put a number of other companies in the same predicament as Hooker, and will probably push the total cleanup costs well into the billions of dollars. —THOMAS H. MAUGH II

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