SURVEY OF 1995, 1996 and 1997 GRADUATES

ABSTRACT

Students who graduated in the spring or summer quarters of 1995, 1996 and 1997 were asked to describe and evaluate their experiences at the University of California, Santa The study covered many facets of the undergraduate experience Cruz (UCSC). including graduates' evaluations of the quality of their undergraduate education, their educational plans and goals, current occupation, and attitudes toward UCSC. Eight hundred and sixteen graduates (19% of those contacted) answered the surveys. Acceptance rates to graduate or professional schools were moderately high, with about 77% of those who applied receiving at least one offer of acceptance. About one in eight of the graduates were enrolled in postbaccalaureate educational programs, a 50% decline from 1993. Sixty-one percent of the graduates who chose to enter the work force had obtained full-time employment, but 13% were unable to obtain acceptable employment. Santa Cruz graduates were quite satisfied with their undergraduate education and perceived the University to have played a positive and influential role in their intellectual and personal development. Graduates continue to be concerned about the acquisition of job skills, career planning, and the quality of faculty advising.

Kay Wilder prepared this report, released in March 1999. Additional hard copies may be requested from the Office of Planning and Budget, UC Santa Cruz, Santa Cruz, California 95064 (831-459-2446). The report may be viewed on the World Wide Web at http://planning.ucsc.edu/irps/enrollmt/GRADS/9597/REPORT.HTM

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EXECUTIVE SUMMARY

As part of University of California, Santa Cruz's (UCSC) continuing effort to evaluate the quality of undergraduate education, students who graduated in the spring or summer quarters of 1995, 1996 and 1997 were asked to describe and evaluate their experiences. The questionnaire used in this study was developed by the Institutional Research and Policy Studies group of the Office of Planning and Budget in consultation with a variety of staff from throughout the campus. The study covered many facets of the undergraduate experience including graduates' evaluations of the quality of their undergraduate education and their major program. Additionally, information was collected about graduates' educational background, educational plans and goals, current occupation, and attitudes toward UCSC.

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The surveys were distributed with students' diplomas (about five months after graduation). About 19% of the graduates (816 people) returned the questionnaires. Although there were a few differences between the survey respondents and the population of graduates, the survey respondents appear to be fairly representative of the graduating class. However, the low response rate requires that all results from this survey be interpreted with great caution.

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Educational and Occupational Plans and Activities

Specifically, the surveys revealed that:

- about 60% of Santa Cruz graduates had applied or planned to apply to post-baccalaureate programs (down from 67% in 1993);
- Santa Cruz graduates appear to be fairly successful in gaining admission to graduate or professional schools; 77% of the applicants were accepted by at least one of the institutions to which they applied;
- thirteen percent of 1995-97 graduates were currently pursuing further education, a Page 7 large decrease from the 1993 and 1991 studies:
- fifty-eight percent of the graduates not enrolled in post-baccalaureate programs secured full-time employment, a decrease from the 1993 survey (64%);
- seventeen percent of 1995-97 graduates were unemployed (this compares to 11% Page 8 of 1993 graduates);
- forty percent of employed UCSC graduates consider their jobs to have career Page 11 potential, an increase compared to 1993 graduates (33%);
- forty-nine percent of employed Santa Cruz graduates secured jobs that require Page 11 college degrees; and
- the average salary for fully employed graduates was \$22,064 (\$27,509 for the 18% Page 11 who considered their jobs to have definite career potential).

Undergraduate Education and Major Program

Most graduates held favorable views of their undergraduate education at UC Santa Cruz. Specifically, 1995-97 graduates:

- were well satisfied with the overall quality of their undergraduate education at Page 13 UCSC;
- were satisfied with the quality of teaching and the degree of challenge and rigor in Page 13 coursework;
- were less satisfied with the content of the core and general education courses, and Page 13 the availability of courses in the major;
- reported the need for better job skills and career planning, better academic advising, and more opportunities to work with faculty. These areas were also identified as needing improvement in the 1993 and 1991 studies.

In general, graduates' satisfaction with their undergraduate education had increased from the 1993 study. In 1995 graduate's satisfaction levels were most improved with their major advisor, the availability of courses in the major, and an improved SES. 1996 ratings showed a large increase in satisfaction with course advising, but large decreases in satisfaction with the timeliness and quality of narratives and the helpfulness of board staff.

Intellectual and Personal Growth

Graduates expressed mixed satisfaction with their intellectual and personal changes while at the University. The 1997 graduates:

- were generally satisfied with their intellectual growth at Santa Cruz, having gained Page 15 skill in critical thinking and reasoning ability,
- were generally satisfied with the development of their intellectual curiosity, and with Page 15 understanding of different cultures and ways of life,
- had decreased satisfaction with writing and speaking skills, and an understanding of Page 15 government,
- had less growth in self-confidence and self-understanding, personal identity, experience and skill in relating to others, ability to cope with pressure or change, personal philosophy of life, awareness of ethical principals, and spiritual/religious values than graduates in 1993.

Overall, graduates' satisfaction with their personal development was lower than in the 1993 study. This trend was also evident from 1988 to 1991—thus there has been a general decline in graduate's personal development ratings over the past decade. This trend is apparent in increasing improvement index ratings for many items.

INTRODUCTION

Study Design

This study was undertaken as part of the University of California, Santa Cruz's (UCSC) continuing effort to evaluate the quality of undergraduate education. The 1995-1997 survey of graduates was designed to serve two purposes: to give recent graduates an opportunity to evaluate their experiences and impressions of UCSC; and to use this information to help "understand both the cognitive and substantive development of students, as well as their opinions concerning their educational experience." Prior to the recent 1995-97 study, three previous surveys conducted in 1988, 1991, and 1993 contained extensive questions on graduates educational plans and objectives, current employment; satisfaction with their intellectual and personal growth; an evaluation of the undergraduate education provided at UCSC, as well as topical questions. In recent years, the questionnaires were shortened to four pages and included three pages on educational plans and objectives, occupational and personal information, and opinions. A topical section was rotated each year to include questions on students' (1) undergraduate education, (2) major program, and (3) personal growth while at UCSC.

Background Characteristics of Entering Students

The expectations and values that students bring to UCSC are likely to be an important influence on their evaluation of their undergraduate experiences. Most (62%) respondents entered UCSC as freshmen, and the remainder entered as transfer students. Results from ACE surveys show that freshmen entering UCSC in 1991, 1992 and 1994 were more interested in social issues than with employment concerns. They had less interest in pre-professional majors, business or engineering than their national peers did. In 1992, seventy-two percent of freshpersons at selective public universities considered "being well off financially" as either a very important or essential goal of their education, yet only 48% of UCSC freshpersons agreed. In contrast, UCSC freshpersons were more likely to value environmental clean-up, promoting racial understanding, and participating in community action than students nationwide. A greater percentage of UCSC students stated their life goals included influencing social values, making theoretical contributions to science, creating original works, and developing a philosophy of life than their national comparison group. In general, entering UCSC students placed great importance on theoretical and creative contributions to society when envisioning their careers.

Surveys of 1993 frosh and transfer students found that the majority described their political beliefs as liberal (53% of frosh vs. 55% of transfer students). Factors affecting students' decision to attend UCSC were similar, although transfer students gave higher priority to majors offered, the quality of instruction, academic reputation and small classes than new freshpersons. It is likely that they entered UCSC with similar ideologies as frosh, but probably had more pragmatic goals and plans than younger students.

As recommended to the California Postsecondary Education Commission in *The Final Report of the Joint Committee for Review of the Master Plan for Higher Education* (p. 129).

METHODS AND ANALYSIS

The Institutional Research and Policy Studies unit of the Office of Planning and Budget developed the Survey of Graduates. All surveys provided information about graduates'

- demographic characteristics and educational background;
- current educational plans and objectives;
- current occupational situation; and
- general attitude toward UC Santa Cruz.

In addition, special topics included:

- attitudes about the quality of their undergraduate education (1995);
- evaluation of their major program (1996); and
- attitudes about the campus' contribution to their personal development (1997).

The surveys were distributed to all undergraduates who graduated in spring and summer of 1995, 1996 and 1997. The surveys were mailed to graduates with their diplomas four or five months after graduation. All surveys were four pages long and required about 15 minutes to complete. A copy of the questionnaire (including 1995, 1996 and 1997 special topics) is included in Appendix A.

In comparing differences between the averages of student groups, statistical tests were used to help determine if the differences were greater than expected by chance. References to statistically significant results refer to differences that would be found by chance no more than five percent of the time. Although some differences may be large enough to be statistically significant, they may not be large enough to be of practical importance. Evaluation of the practical importance of these findings is left to the reader.

To examine how representative the survey respondents were of the entire graduating class, the demographic characteristics of the 816 survey respondents were compared to all 4,904 students who graduated in the spring and summer quarter of 1995, 1996 and 1997. Although there were some differences, there was a high degree of similarity between the respondents and the population of graduates (demographic comparisons are displayed in Appendix B). The largest difference was the underrepresentation of men responding to the survey. The proportion of Chicano respondents was also somewhat low compared with those in the population of graduates. However, based on most demographic comparisons, the survey respondents overall appear to be fairly representative of the graduating class.

There are limitations as to what this survey can reveal about UCSC's former students. The low response rate requires that all results from this survey be interpreted with great caution. As the survey was administered several months after graduation, some graduates may not have had the opportunity to pursue their career and educational plans. For these graduates, current career and educational activities may not reflect their long-term goals and objectives. Finally, these results reflect students' recent accomplishments. It provides limited information on what they plan to accomplish or what they are capable of accomplishing.

RESULTS

This section contains six parts: (1) current educational activities and goals; (2) current occupation; (3) undergraduate education; (4) intellectual and personal development; (5) quality of the student's major program, and (6) attitudes toward UC Santa Cruz.

Educational Activities and Goals

Six out of ten of UC Santa Cruz's 1995-1997 graduates planned to pursue further education. Thirteen percent of the graduates were already attending post-baccalaureate degree programs by the time they returned their surveys (71% of those accepted into post-baccalaureate degree programs had enrolled). Five percent were either pursuing personal educational interests or had declined to enroll for the fall quarter, and another 47% had either applied for later terms or planned to apply in the near future.

The graduate and professional school acceptance rates for UCSC's graduates were moderately high. Seventy-seven percent of the graduates who had applied to graduate school were accepted by at least one institution. This percentage has dropped from about 86% in 1993. Applicants to graduate programs typically submit more than one application. The 1995-97 graduates reported submitting a total of 651 applications (an average of 3.4 per applicant, similar to the 1993 grads) and receiving 302 acceptances. The acceptance rate (46%) per application dropped from 63% in 1993. It appears that recent UCSC graduates may have lost some of the competitive edge of past graduating classes, but never-the-less still have a fairly good chance of gaining admission to graduate or professional school.

As shown in Table 1, over the past three survey periods graduates enrolled in post-baccalaureate programs were split among certificate programs (1%), master's level programs (7%), and doctoral level programs (4%). Postbaccalaureate schools that have accepted and enrolled UCSC graduates are listed in Appendix C and D and degree programs are listed in Appendix E. In most cases, the graduate programs were full-time.

Table 1
Percent Enrollment in Post Baccalaureate Programs by UCSC Graduates

Type of Program ²	<u>1988</u>	<u>1991</u>	<u>1993</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
Certificate or Credential	4.4%	4.2%	2.7%	1.3%	1.1%	0.8%
Master's Degree	11.3%	7.1%	11.2%	8.4%	6.5%	5.5%
Academic Doctorate	4.7%	6.6%	4.3%	3.4%	3.1%	2.1%
Professional Doctorate	5.3%	2.8%	1.7%	0.9%	2.3%	0.8%
Total Enrolled	25.7%	20.7%	19.9%	14.1%	13.0%	9.3%

Certificate programs shown in 1995 through 1997 required a bachelor's degree for admission. Master's programs include MA, MS and professional master's degrees. Academic Doctorates include all Ph.D. and Ed.D. programs. Professional Doctorates include all nonacademic doctoral level programs (e.g., LL.D., MD).

Assuming the students who intend to apply to graduate or professional school in the future will have the same acceptance rates as those who have already applied, less than half of the Santa Cruz graduates will eventually enter post-baccalaureate programs.³ As shown in Table 1, fewer graduates immediately enrolled in postbaccalaureate programs than in previous years, and the percentage has been steadily declining over the past decade.

Occupational Activities

Results on occupational activities are based on the 702 graduates who were not enrolled in college. Salary information was available for 508 of the non-enrolled graduates. The employment rates for the 1995 through 1997 graduating classes were lower than rates for 1993 and 1991 graduates. The important exceptions to this trend were graduates in engineering, computer sciences and humanities, who were employed at higher rates than in 1993. Employment rates by major area of study shown in Table 2. Graduates' 1995-97 salaries shown in Tables 2 through 7 are based on a three-year average of graduate's salary estimates. In contrast, salaries from previous years derived from salary categories.

Table 2
Employment Rates by Major Area of Study

	Full-time		Part-time			Not Working	
Major Area		Looking	Not Look	ing Total	Looking	Not Looking	Total
Arts	48%	17%	13%	30%	18%	4%	22%
Economics	59%	5%	5%	9%	27%	5%	32%
Engin./Comp. Science	82%	4%	4%	7%	11%	0%	11%
Humanities	61%	11%	13%	24%	9%	7%	15%
Life Sciences	58%	11%	14%	25%	12%	5%	17%
Math/Physical Science	s 74%	3%	18%	21%	5%	0%	5%
Social Sciences	55%	14%	14%	27%	13%	5%	18%
1995-97 Total	58%	12%	13%	25%	12%	5%	17%
Avg. Salary	\$22,064	\$12,251	\$11,390	\$11,791	n/a	n/a	n/a
Stnd. Dev.	\$11,327	\$8,934	\$6,422	\$7,675	n/a	n/a	n/a
1993 Total	64%	17%	8%	25%	8%	3%	11%
Avg. Salary	\$17,916	\$8,083	\$9,735	\$8,613	n/a	n/a	n/a
1991 Total	63%	9%	12%	21%	n/a	n/a	16%
Avg. Salary	\$18,273	\$9,235	\$10,217	\$9,796	n/a	n/a	n/a

The number is found by the following calculation: Current enrollments + [Acceptance Rate] X [Projected Enrollment Rate] X [Number who Plan to Apply] = 13% + [.77] X [.90] X 47% = 46%. This assumes future grads who defer their applications will be highly motivated to enroll once accepted. This number who plan to apply is probably a good estimate because the survey requested rather specific information about intention to apply (names of the universities, fields of study, and degree programs).

A smaller percentage of recent Santa Cruz graduates obtained full-time employment within six months than students who graduated in 1993, and fewer had obtained any employment. The lowest rates of those who were looking for work but could not find it were in math/physical science and humanities. The largest percentages of unemployed were in arts and economics. The majors with the largest percentages of full time employment were engineering and computer science, math and physical sciences, and humanities majors. Table 3 summarizes salaries of employed (part- and full-time) graduates are by major. Only values of three or more responses were reported. Students with degrees in computer science or computer engineering reported the highest median salary (the lowest salaries were reported by graduates who majored in anthropology, art, music and women's studies).

Table 3
Salaries of Graduates by Major

			Number	
Major	Mean	Median	Full-time	Part-time
American Studies	\$17,537	\$14,500	16	3
Anthropology	\$16,038	\$12,240	26	7
Art	\$12,183	\$12,000	12	10
Art History	\$16,900	\$14,500	5	3
Biology (All majors)	\$16,338	\$15,000	51	25
Biochemistry	\$26,000	\$28,000	4	1
Chemistry	\$30,722	\$28,750	8	1
Comp. Sci./ Comp. Engineering	\$46,396	\$41,900	24	2
Community Studies	\$15,307	\$14,500	11	5
Economics	\$29,357	\$29,500	13	2
Environmental Studies	\$15,826	\$16,160	15	5
Film	\$18,500	\$15,500	3	1
History	\$17,348	\$16,000	25	5
Latino Studies	\$20,643	\$20,000	7	0
Languages	\$20,930	\$22,000	7	2
Linguistics	\$22,333	\$25,000	4	0
Literature	\$16,112	\$17,120	26	15
Math	\$17,841	\$18,000	10	4
Music	\$11,900	\$10,500	4	2
Philosophy	\$19,000	\$19,500	4	0
Physics	\$22,560	\$22,000	7	4
Politics	\$21,159	\$20,000	13	8
Psychology	\$17,675	\$17,200	54	25
Sociology	\$21,057	\$20,000	27	12
Theater Art	\$15,812	\$14,500	7	5
Women's Studies	\$13,222	\$10,000	5	4

Recent Santa Cruz graduates were most likely to take jobs in business or industry (51%) and education (20%). Other employment was divided among non-profit organizations (13%), government (6%), self-employment (5%), and "other" (6%). Table 4 shows that the percentage of graduates employed by business and industry jumped by one-third to include over half of those employed.

Table 4
Employers of Santa Cruz Graduates

	1993		1995-	
<u>Employer</u>	Percent	Avg. Salary	Percent	Avg. Salary
Business/Industry	38%	\$16,925	51%	\$21,786
Educational Institution	17%	\$14,682	20%	\$17,284
Government	6%	\$11,750	6%	\$19,410
Non-Profit Organization	13%	\$15,077	13%	\$15,862
Self-employed	9%	\$14,167	5%	\$20,950
Other	16%	\$13,829	6%	\$13,345

1995-97 Santa Cruz graduates took more jobs in education, computer science and engineering, and sales or marketing jobs than did the 1993 graduates (see Table 5).⁴ As might be expected, these differences are also influenced by academic major.

Table 5

Type of Jobs Obtained by Santa Cruz Graduates

	1993			1995-97
<u>Employer</u>	Percent	Avg. Salary	Percent	Avg. Salary
Advertising/Public Relations	na	na	3%	\$19,147
Clerical	14%	\$14,167	12%	\$16,684
Educator	11%	\$13,818	17%	\$16,015
Engineer/Computer Scientist	4%	\$28,000	7%	\$39,203
Financial Services Professional	1%	\$17,500	2%	\$20,941
Food Services	7%	\$10,346	8%	\$13,528
Health Professional	6%	\$12,318	3%	\$16,486
Law Enforcement	na	na	0.3%	\$31,000
Legal	na	na	1%	\$25,917
Life Sciences Professional	3%	\$15,500	5%	\$19,374
Manager/Administrator	7%	\$18,786	5%	\$21,768
Personnel Professional	1%	\$8,500	1%	\$27,400
Sales/Marketing	8%	\$16,300	11%	\$17,188
Social Scientist	1%	\$23,500	1%	\$20,811
Social Services Professional	6%	\$17,773	7%	\$14,441
Visual/Performing Artist	2%	\$12,500	4%	\$19,400
Other	30%	\$14,211	14%	\$20,523

⁴ Appendix E contains a list of the jobs accepted by UC Santa Cruz Graduates.

As illustrated in Table 6, fewer 1995-97 graduates accepted temporary employment and more found jobs that they considered to have definite career possibilities than did the 1993 UCSC graduates.

Table 6
Career Potential

		1993		1995-97
<u>Employer</u>	Percent	Avg. Salary	Percent	Avg. Salary
Job has definite career possibilities	15%	\$21,700	18%	\$27,509
Job has possible career possibilities	19%	\$18,250	22%	\$21,617
Temporary job to earn money	45%	\$13,259	41%	\$16,870
Temporary until another can be found	21%	\$11,866	20%	\$14,754

The percentage of students whose jobs required a degree rose from 1993 (see Table 7). Nearly half of Santa Cruz graduates held positions requiring college degrees—regardless of whether their major was related to their job field or not. Another fourth said that the degree was helpful in securing their jobs, even though it was not required. For the remaining graduates, their degree was not a factor in obtaining their job. As in 1993, graduates' salaries were closely linked to the importance of their degree to their job.

Table 7
Importance of Degree in Employment

		1993		1995-97
Importance of Degree to Job	Percent	Avg. Salary	Percent	Avg. Salary
Requires related degree	28%	\$20,064	34%	\$23,737
Requires degree	12%	\$16,125	15%	\$21,801
Degree not required, but helpful	27%	\$14,269	24%	\$16,924
Degree makes no difference	32%	\$11,210	27%	\$15,014

Undergraduate Education

Graduates in 1995 were asked to rate many aspects of their undergraduate education. Both satisfaction and importance were evaluated on a five-point Likert scales (higher ratings express more favorable evaluations, Appendix A). The twenty-three items covered several topics: academic quality, instruction, general education, the major program, faculty contact and social opportunities. Although satisfaction and importance were both rated on a five-point scale, the two scales are not equivalent. Direct numerical comparisons between satisfaction and importance ratings are inappropriate. In Table 8, the ratings are ranked by importance within each topic area. In this table and others, differences on the order of 0.25 or smaller are within the variation expected, and should not be considered to be significant changes.

Table 8

Average Satisfaction and Importance Ratings of Undergraduate Education at Santa Cruz⁵

	Satisfactio 1993	n Average 1995	Importance 1993	e Average 1995
Academic Quality				
Availability of courses in your major	3.36	3.79	na	4.77
Overall quality of your education	4.28	4.28	4.64	4.69
Degree of challenge and rigor in your courses	4.09	4.09	4.45	4.51
Availability of general education courses	3.45	3.67	3.98	3.68
Breadth of your general education courses	4.92	na	3.93	na
Content of your general education courses	na	3.37	na	3.71
Content of core courses	3.41	3.40	3.50	3.61
Teaching				
Faculty as teachers	4.04	4.13	4.81	4.83
Accessibility of the faculty	3.91	3.99	4.53	4.47
Overall quality of the TAs	3.55	3.70	4.34	4.36
Subject matter knowledge of TAs	3.75	3.73	4.40	4.35
Communication and teaching skills of TAs	3.54	3.54	4.41	4.32
Opportunity to work with individual faculty	3.57	3.67	4.25	4.23
Advising				
Quality of academic advising	2.99	3.19	4.11	4.24
Your major advisor	2.95	3.42	na	4.24
Social Opportunities				
Contributions of the UCSC colleges to learning	3.34	3.29	3.50	3.51
Opportunities for involvement in campus activities	3.78	3.70	3.43	3.44
Opportunities for personal involvement in off-campus activities	3.78	3.44	3.43	3.45
Development of long-term interest in fitness	na	3.27	na	3.11
Opportunities for involvement in athletics/sports	3.43	3.53	2.99	3.06
Opportunities to attend UCSC collegiate sports events	3.00	2.87	2.28	2.33
Career Development				
Opportunities for developing career plans and skills	s 3.15	2.81	4.37	4.39
Opportunities for acquiring specific job skills	2.68	2.67	4.15	4.15
Contribution of your education to improved SES	2.19	3.52	3.08	4.07

Satisfaction responses ranged from 1 (Very Dissatisfied) to 5 (Very Satisfied) and importance responses varied from 1 (Not Important) to 5 (Extremely Important). Questions not asked on the 1993 or 1995 survey are denoted "na."

The items with the highest satisfaction ratings were overall quality of the education, (90% of students were satisfied for an average rating of 4.28), the degree of challenge and rigor of the courses, (82%, 4.09) and faculty teaching (83%, 4.13). These items also received the highest ratings on 1993 and 1991 surveys. Only half of students were satisfied with their major advisor, but only about 45% with the quality of academic advising in general. Although this indicates a problem area, ratings for the quality of advising improved from 1991 and 1993 surveys. Lack of satisfaction with career development opportunities is evident from the low average satisfaction ratings and high importance levels given to these items. However, satisfaction with most areas of student's undergraduate education either stayed about the same or improved between 1993 and 1995.

Differences Between Groups on Undergraduate Education. Three groups were analyzed. Ethnic minority students (i.e., African American, Chicano, Other Latino, and Native American) were compared to Asian and European students; transfer students were compared to students who entered as freshpersons, and students were compared by academic division.

No significant differences were found between the satisfaction ratings of underrepresented minority students and others. Not surprisingly, transfer students were less satisfied than "native freshpersons" with the colleges' contributions to their education. Transfer students were also a little less satisfied with the quality and subject knowledge of their TAs. Several significant differences were found by academic division. Students majoring in the social sciences rated their satisfaction with the content of general education courses much more highly than students in other divisions. They were also happier with the content of core courses than other majors. Art students were much less satisfied with the availability of major courses than other students. Students in computer engineering and computer science (n=9) were much less satisfied with the quality of the teaching faculty than students in all other areas. However, these engineering students were more satisfied with opportunities for developing career plans and acquiring job skills, and with the improvement of their economic and social standing.

Improvement Indices. Low satisfaction ratings may not be cause for concern if students consider the subject unimportant. An "improvement index" was created to compare the importance and satisfaction ratings on each of the twenty-three questions on undergraduate education. The improvement index is the percentage of students who expressed dissatisfaction in an area they rated as moderately important or very important. The index helps us to understand how students' needs in each area have been met and points to areas that require improvement. Table 9 summarizes the items that were classified as needing the most improvement.

The area of most concern to graduates was the lack of adequate preparation for their careers (also discussed under *Personal Growth*). Like earlier surveys of recent graduates, academic advising also continued to be a serious problem for students. The improvement indexes were 38% in 1991, 35% in 1993, and 34% in 1995, each of which was the highest ranked academic problem in undergraduate education. As in past surveys, the quality of advising within the major was also a large problem for students. Other areas identified by the index as needing improvement included the chance to work with individual faculty, attend sports events, greater availability of major courses, and a greater role of the colleges in student learning.

Table 9
Areas of Undergraduate Education Needing Improvement

	Percentage of Graduates		
	1991	1993	1995
Areas Needing Significant Improvement			
Opportunities for acquiring specific job skills	31%	44%	45%
Opportunities for developing career plans/skills	24%	31%	44%
Quality of academic advising	38%	35%	34%
Quality of your major advisor	31%	na	27%
Other Areas Needing Improvement			
Opportunity to work with individual faculty	21%	24%	22%
Opportunities to attend sports events	na	17%	21%
Contribution to improved SES	21%	35%	20%
Availability of courses in your major(s)	32%	na	19%
Contribution of the colleges to learning	19%	16%	18%
Opportunities for off-campus activities	15%	15%	17%
Long-term interest in sports or fitness	24%	32%	17%

The improvement index also revealed some good news. Areas not identified as needing improvement include some that are generally identified as strengths of UC Santa Cruz. These include the quality of teaching and the quality of undergraduate education.

Differences Between Groups on Improvement of Undergraduate Education. There were only a few important differences between groups of students on the improvement indices. More students (35%) majoring within the arts division wanted improved availability of major courses than other students (17%). Asian students were more critical of the subject-matter knowledge of their TAs than other students. About half of native freshmen wanted more opportunities for developing career plans and skills, compared with 36% of transfer students.

Personal Development

The 1997 survey asked the graduates to evaluate the campus' contribution to their personal growth in twenty-three questions on the development of abilities, skills, and values. These items were scored on a five-point scale for both development and importance. For most items, graduates rated their personal growth as moderate (3.0) to considerable (4.0), but rated the value as very important (4.0) to extremely important (5.0). Table 10 reports the averages on each of these items.

The most important areas of personal development were self-understanding and self-confidence, critical thinking skills, writing skills, intellectual curiosity. Although 1997 graduates rated most items a little lower in importance than earlier graduates, these items were highly rated in the 1997 and 1993 surveys. The lowest rated areas were economic status, understanding government, sports/fitness, and spiritual values. With the exception of understanding government, these items

were also rated as only moderately important to earlier graduates. The ratings for both development and importance of understanding the workings of government dropped dramatically for 1997 graduates compared with those graduating in 1993.

Table 10

Development and Importance Ratings for Personal Growth

	Development Average ⁶		Importance	Average
Ability or Skill	1993	1997	1993	1997
Self-understanding and self-confidence	3.91	3.61	4.74	4.61
Critical thinking skills	4.06	3.98	4.63	4.58
Writing skills	3.90	3.76	4.56	4.56
Intellectual curiosity	4.12	4.07	4.63	4.54
Get along with different ethnic groups	3.55	3.52	4.56	4.49
Sense of personal identity	3.85	3.52	4.62	4.44
Understanding different cultures	3.97	3.91	4.43	4.44
Personal accountability and responsibility	3.59	3.61	4.47	4.43
Ability to set and achieve goals	3.48	3.47	4.51	4.42
Speaking skills	3.36	3.15	4.49	4.36
Ability to create original works or projects	3.55	3.58	4.45	4.30
Experience and skill in relating to others	3.87	3.52	4.56	4.28
Career plans and skills	3.15	3.06	4.37	4.24
Ability to cope with pressure/change	3.59	3.28	4.44	4.20
Personal philosophy of life	3.69	3.45	4.43	4.21
Awareness of moral/ethical principles	3.65	3.32	4.38	4.19
Ability to work as member of a team	na	3.39	na	4.17
Acquisition of specific job skills	2.68	2.66	4.15	4.08
Leadership skills	3.18	3.22	3.95	3.86
Making judgements on international problem	is na	2.67	na	3.39
Improved economic or social status	2.19	2.41	3.08	3.27
Understanding the workings of government	3.16	2.42	3.85	3.22
Long-term interest in sports or fitness	2.32	2.17	3.23	3.16
Spiritual or religious values	2.46	2.25	3.27	3.00

Differences Between Groups on Personal Development. Although underrepresented minority students rated their personal development somewhat more highly than other students did, most differences were not statistically significant. However, underrepresented students on average gave themselves moderate ratings on making judgements about international problems (3.1), while white students indicated less development in this area (2.5). Students who entered UCSC as freshmen reported more development than transfer students did in understanding different cultures, awareness of moral principals, spiritual values, and sense of personal identity. Native

In 1993 and 1997 development was measured on a five-point scale: (1) no development, (2) some development, (3) moderate development, (4) considerable development, (5) exceptional development.

frosh also felt they had experienced more development in their team skills and critical thinking skills than transfer students had. Compared with other students, students majoring in Computer Science or Computer Engineering reported little development in speaking skills, writing skills, creative skills, understanding of different cultures, sense of personal identity, philosophy of life, spiritual values, ability to get along with different people, and ability to work as a member of a team.

Improvement Indices. Table 11 displays comparison ratings (improvement indices) of importance and satisfaction levels. As in past years, acquisition of specific job skills had the largest number of students who were dissatisfied in an area that they considered important. Areas of rising importance ratings were in a long-term interest in fitness/sports, understanding the workings of government, an understanding of international problems, leadership ability, a sense of personal identity, ethical principals, and developing a personal philosophy of life.

Table 11
Areas of Personal Growth Needing Improvement

	Percentage of Graduates			
	19917	1993	1997	
Areas Needing Significant Improvement				
Acquisition of specific job skills	31%	44%	44%	
Long-term interest in sports or fitness	24%	32%	39%	
Understanding the workings of government	19%	25%	35%	
Improved economic or social status	21%	35%	33%	
Development of career plans and skills	24%	31%	31%	
Spiritual or religious values	14%	25%	27%	
Making judgements about international problems	14%	18%	27%	
Clear and effective speaking skills	15%	20%	25%	
Ability to lead/guide others	na	21%	25%	
Other Areas Needing Improvement				
Ability to cope with change or pressure	11%	17%	21%	
Ability to work as a member of a team	na	na	21%	
Ability to get along with different ethnic groups	na	22%	20%	
Sense of personal identity	9%	11%	19%	
Awareness of moral and ethical principals	11%	14%	19%	
Personal philosophy of life	9%	14%	18%	
Ability to set and achieve personal goals	19%	17%	18%	

Questions not asked on the 1991 or 1993 survey are denoted "na."

Differences Between Groups on Improvement of Personal Growth. There were several divisional differences between students' ratings of personal development items. Students majoring in sciences and engineering were less likely to be satisfied with their writing skills, their philosophy of life, or their ability to get along with people of different backgrounds or ethnic groups than those in the arts, humanities, or social sciences. Additionally, arts and engineering students were less satisfied with the development of their critical thinking skills (the ability to analyze information, synthesize concepts and draw inferences) compared to students in the humanities, natural sciences and social sciences.

Table 12

Personal Development Improvement Index by Academic Division

Areas Needing Improvement	<u>Art</u>	<u>Eng</u>	<u>Hum</u>	<u>NS</u>	<u>SS</u>	<u>All</u>
Clear and effective writing skills	18%	44%	4%	26%	14%	15%
Personal philosophy of life	9%	44%	22%	26%	13%	18%
Get along with different people	18%	44%	16%	34%	14%	20%
Critical thinking skills	29%	25%	7%	2%	9%	10%

Asian and white students were least likely to be satisfied with the development of career plans and skills, and white students were least likely to be satisfied with the development of sports or fitness interests. No other group differences were evident.

The Student's Major Program

The 1996 survey's area of special interest included questions on student's major programs. Graduates were asked to rate the importance and their satisfaction with their major in a series of 27 questions. These probed the quality of advising, instruction, curriculum and training for advanced study and their career. Survey responses are shown in Tables 13 and 14. All questions are specific to the students' majors.

As in 1993, students in 1996 were quite satisfied with faculty instruction, quality of knowledge received in the major, and the challenge and rigor in coursework, all considered extremely important. However, the satisfaction rating for the timeliness of narratives dropped from 2.95 to 2.40, and the accuracy and fairness of evaluations, another important area, dropped from 4.00 to 3.79. Other problem areas were the helpfulness of major advisors in giving career guidance, and in general preparation for a career. The helpfulness of the advisor in course selection also continued to be a problem, but the satisfaction rating rose from 2.81 in 1993 to 3.26 in 1996, indicating solid improvements in advising. In general, satisfaction ratings are broadly consistent with previous with results from 1993. New to the 1996 survey, importance ratings showed all aspects of the major program to be significant to students, with quality of instruction, wide selection and availability of courses, fairness of narratives and general training in knowledge of the field to be the most important areas. Of these items, students were least satisfied with the selection of courses in the major.

Table 13
Satisfaction and Importance Ratings for the Major Program

	Satisfaction	Average	<u>Importance</u>	Average
Aspect of Major Program	1993	1996	1993	1996
Quality of instruction by faculty in major	4.23	4.12	na	4.85
Availability of courses in major	3.60	3.66	na	4.64
Accuracy/fairness of narratives in major	4.00	3.79	na	4.58
Training in general knowledge of field	4.15	4.01	na	4.56
Wide selection of courses in major	3.36	3.42	na	4.55
Preparation for advanced study	3.80	3.73	na	4.43
Training in writing skills	3.63	3.64	na	4.40
Challenge and rigour of your courses	4.09	4.01	na	4.39
Preparation for career	3.30	3.27	na	4.36
Helpfulness of narratives for feedback	3.97	3.80	na	4.36
Overall quality of your TAs	3.83	3.63	na	4.33
Coherence of the curriculum in major	3.89	3.72	na	4.30
Training in technical skills	3.53	3.51	na	4.27
Faculty as informal advisors/mentors	3.82	3.80	na	4.25
Class size in major	3.63	3.65	na	4.25
Diverse points of view in major courses	3.70	3.73	na	4.19
Training in creating original works	3.40	3.40	na	4.19
Helpfulness of board office staff	3.95	3.70	na	4.10
Timeliness of narratives	2.95	2.40	na	4.08
Outside contact with faculty in major	3.86	3.79	na	4.05
Training in collaboration/group skills	3.47	3.53	na	4.03
Educational value of senior comprehensive	3.67	3.57	na	3.94
Quality of advising when selecting a major	na	3.36	na	3.81
Collegiality of other students in major	na	3.55	na	3.75
Helpfulness of advisor in career guidance	na	2.81	na	3.69
Helpfulness of advisor in course selection	2.81	3.26	na	3.58
Availability of informal study groups	na	3.50	na	3.48

Table 14 presents average satisfaction ratings with the major program by division. Comparisons between the satisfaction ratings should be treated with caution. The number of graduates in most groups is quite low, and the divisional groupings combine students with different programs of study. In general, students majoring in Arts programs were most satisfied with class size and narrative evaluations, but displeased with the selection and availability of courses in the major. Humanities majors favored the quality of instruction, narratives, and faculty as informal advisors, but were less satisfied with training in technical skills received. Natural science students felt their courses were most rigorous and challenging, were satisfied with the selection and availability of courses, training in technical skills, but were less satisfied with the helpfulness of narratives for feedback. Social science students were most satisfied with the quality of instruction by faculty, but gave lower ratings to training in technical skills and class size than other majors.

Table 14
Satisfaction Ratings by Major Division (Ranked by Importance)

	Satisfaction Average					
Aspect of Major Program	All	AR	HU	NS	SS	Sig. Diff.
Quality of instruction by faculty in major	4.1	3.6	4.3	4.0	4.2	*
Availability of courses in major	3.7	2.7	3.6	4.1	3.7	*
Accuracy/fairness of narratives in major	3.8	4.0	4.1	3.5	3.7	
Training in general knowledge of field	4.0	3.8	3.9	4.3	4.0	
Wide selection of courses in major	3.4	2.4	3.3	3.8	3.5	*
Preparation for advanced study	3.7	3.6	3.7	3.9	3.7	
Training in writing skills	3.6	3.3	3.9	3.7	3.6	
Challenge and rigour of your courses	4.0	3.5	4.0	4.4	3.9	*
Preparation for career	3.3	3.0	3.2	3.6	3.2	
Helpfulness of narratives for feedback	3.8	4.1	4.1	3.4	3.8	*
Overall quality of your TAs	3.6	3.6	3.6	4.0	3.5	*
Coherence of the curriculum in major	3.7	3.7	3.8	4.0	3.6	
Training in technical skills	3.5	3.9	3.4	3.9	3.3	*
Faculty as informal advisors/mentors	3.8	3.6	4.2	3.7	3.7	*
Class size in major	3.7	4.1	4.1	3.6	3.4	*
Diverse points of view in major courses	3.7	3.3	3.9	3.6	3.8	
Training in creating original works	3.4	3.5	3.7	3.4	3.2	
Helpfulness of board office staff	3.7	3.7	3.9	3.5	3.6	
Timeliness of narratives	2.4	2.0	2.4	2.8	2.3	
Outside contact with faculty in major	3.8	3.4	4.1	3.8	3.7	
Training in collaboration/group skills	3.5	3.4	3.2	3.8	3.5	
Educational value of senior comprehensive	3.6	3.3	3.9	3.7	3.4	
Quality of advising when selecting a major	3.4	3.0	3.5	3.3	3.4	
Collegiality of other students in major	3.6	3.4	3.6	3.7	3.5	
Helpfulness of advisor in career guidance	2.8	2.3	3.1	2.8	2.7	
Helpfulness of advisor in course selection	3.3	3.0	3.4	3.2	3.2	
Availability of informal study groups	3.5	3.3	3.4	3.6	3.5	
Average number of respondents	235	25	50	46	114	

Differences Between Groups in Evaluations of the Major Program. There were few other differences found in evaluation of the major program. Transfer students were more satisfied with the quality of training in technical skills than students who entered UCSC as freshpersons. Although all students were less than satisfied with the timeliness of narratives, transfer students gave higher marks to timeliness than native freshpersons. There were several small differences between students-of-color and others in their evaluation of the major. Students-of-color were less satisfied than white students that diverse points of view were presented in their major courses. Asian students gave lower ratings than others did to the quality of instruction by faculty in the major, and to the quality of training in collaborative/group skills.

Improvement Index. Timeliness of narrative evaluations was a major problem for the graduates of 1996, who considered it an important issue. Concerns about career preparation and the selection of courses in their major were other large problems. Advising, class size, training in creativity and technical skills, and the value of the senior comprehensive were other important issues needing improvement.

Table 15
Areas of Major Program Needing Improvement

	Percent of Graduates 1996
Areas Needing Significant Improvement	
Timeliness of receipt of narratives	60%
Helpfulness of your major advisor w/ career	38%
Wide selection of courses in your major	27%
Quality of preparation for your career	25%
Other Areas Needing Improvement	
Availability of courses in your major	24%
Quality of advising for major selection	23%
Helpfulness of advisor in course selection	23%
Training in creating original works	23%
Class size in major courses	21%
Helpfulness of staff in board office	21%
Educational value of senior comprehensive	20%
Training in technical skills/methods	17%
Accuracy/fairness of narratives in major	17%

Differences between groups in improvement indices. Students studying within the arts indicated the greatest need for improvement in availability of courses in the major. Fifty-six percent of concerned arts graduates were dissatisfied compared with one-quarter of humanities and social science graduates, and 11% of natural sciences students. Arts graduates were similarly less satisfied with the selection of courses in their major than others. Natural science graduates saw virtually no need for improvement of the quality of their TAs (2%), compared to about 20% of the social sciences graduates. Of those who felt it was important, natural science graduates were more dissatisfied with class size than others, 29% of science majors were dissatisfied compared with 24% of social sciences majors, 10% of arts and 12% of humanities graduates. Transfer students were less pleased with the quality of preparation for advanced study at UCSC than native freshmen. There were no differences in the improvement indices of ethnic groups of students.

Comments about UCSC

Comments were solicited from all classes of graduates on three topics: the most difficult problem a student faced at UCSC, how much money they borrowed to attend the university, and lastly, whether they would choose to attend UCSC again.

The Most Difficult Problems. Graduates from 1995 to 1997 most often cited lack of adequate advising as the most difficult problem they encountered. As students, they would have liked to meet with advisors more often through out their undergraduate careers; they would have liked more help planning course work and choosing majors, and they would have liked information from their advisors about career opportunities. Students also wanted help applying to graduate schools. The most frequent complaints were that advisors were unavailable, seemed disinterested or rushed through appointments. Graduates also wished more job placement services were available through Career Services.

As in past years, lack of financial resources was another important problem. Thirdly, students were frustrated dealing with administrative requirements (such as filing petitions, lost paperwork, long lines and 'non-user-friendly systems'). Large class size and a lack of personal attention from professors, late narratives and difficulty getting into classes were other common problems reported by graduates. Discomfort with political correctness, problems balancing work with school, and problems with TAs were also mentioned. A recurrent issue for ethnic minorities was a sense of cultural isolation and lack of ethnic diversity on campus. Some said they had experienced racial insensitivity or racism.

Those who entered UCSC as freshmen cited the lack of a campus social center as a problem, along with roommate problems, lax academic attitudes by fellow students, adjustment issues, and too much drug use on campus. Transfer students had special problems adjusting to the pace of the quarter system, social isolation, and trouble developing personal relationships with professors. Less commonly mentioned problems for transfers included adjusting to the difficulty of university work and the academic workload, lack of career advising within the major, and lack of course offerings. Some also reported difficulty finding housing, problems balancing school with work and sometimes family.

Amount of Debt. Fewer than half (46%) of the graduates responding to the survey were able to complete their undergraduate degrees without accumulating any debt. This was similar to students graduating in 1993 (48%). Those who borrowed to finance their education accumulated an average debt of over \$11,000, up from \$8,000 in 1993. The average amount borrowed increased each year from \$10,600 for 1995 graduates to \$11,900 for those graduating in 1997.

Based on a categorization of graduates written comments, the accumulation of debt had a significant impact on over one-third of borrowers. About 20% of borrowers intended to defer or abandon further educational plans until they could repay the loans. Another twelve percent felt their present career options were limited by the need to repay debt. Many commented they were less likely to accept internships in their field of interest or to take time off to travel. About two percent said they had chosen to attend a graduate school that was less expensive than their first

choice. Other graduates felt less significant effects; about four percent were resigned to 'going deeper in debt' to attend graduate school, and 24% expressed other primarily emotional concerns about borrowing money. On the other hand, a large number (39%) of those who had incurred debt said it had no effect on their occupational or career plans. Naturally, those who had borrowed the least were less concerned than others; 73% of those with \$5,000 or less in debt felt it had no effect compared with only 30% of those who borrowed more than \$5,000. Like graduates in the past, those who managed not to incur a debt were extremely grateful to parents and others who enabled them to get their degree without having to borrow.

Would Graduates Choose to Attend UCSC If They Could Decide Again? Only eight percent of respondents were would not choose to attend UCSC again, (17% were uncertain). These students were usually dissatisfied with one or more of several issues including:

- dissatisfaction with their major program, course selection or availability,
- a sense of social isolation and lack of social activities or social center,
- dissatisfaction with the prevailing liberal and politically correct attitudes,
- a desire for more technical or practical training,
- they felt disadvantaged by a lack of grades or the lateness or quality of narratives,
- they were disappointed with the quality of teaching assistants, or
- they desired a college setting with more rigor, challenge or prestige.

In general, most graduates were very enthusiastic about their experience at UCSC. The majority of students (75%) said they would still attend UCSC if they were to start over again. Their comments stressed favorite professors, intellectual stimulation, the importance of narrative evaluations, small classes, the colleges, the relaxed atmosphere, the beauty of the campus and the friends they made as the reasons they would do it again. They also noted the quality of the education they received, the importance of their major, and the chance for research and internships as factors in their favorable evaluation of their years at UCSC.

DISCUSSION AND IMPLICATIONS

The survey was designed to examine the quality of the undergraduate education provided to students. Educational quality was examined in several contexts: graduates' current occupational and educational activities; future educational endeavors; graduates' evaluation of their undergraduate experience at Santa Cruz; their assessment of skills, abilities, and intellectual development; and assessment of their major program. In general, it was found that Santa Cruz graduates are satisfied with their undergraduate education and perceive the University to have played a positive and influential role in their intellectual and personal development. Areas in which students thought there could be improvement were:

- the timeliness of narrative evaluations,
- the acquisition of job skills and the development of career plans,
- improved academic and career advising by academic/major advisors,
- development of an interest in sports or fitness,
- understanding the workings of government, and
- an improved social or economic status.

Narrative Evaluations. The timeliness of narrative evaluations was a problem needing improvement for 60% of recent graduates. Missing narratives disappointed students who expected feedback on their academic performance, and disadvantaged those applying to graduate and professional programs. Recent statistics on the percentage of outstanding narrative evaluations show this to be an on-going problem.⁸ However, improvements due to the on-line availability of narratives to students may help to alleviate this problem.

Advising. Although satisfaction ratings increased for students graduating in 1995 and 1996, advising continued to be identified as an area that required considerable improvement. Graduates felt that poor advising had a significant and adverse impact on student progress, satisfaction, and career prospects. The long-term nature of the advising problems on campus underscores the importance of UCSC's continuing efforts to improve advising.

Career Skills and Plans. Freshmen who entered UCSC in the early 1990s were far more interested in the intellectual benefits of an education than their peers at other institutions. In retrospect, these students were quite satisfied with the overall quality of their education, but were less satisfied with obtaining specific job skills, improvement of their economic status, and career planning. The increased interest in obtaining career skills may be the result of several factors. As UC fees increased during the 1990s students had fewer resources available to pay for their education. This probably contributed to the increases in average amount of their debt with each graduating class. The need to obtain work soon after graduation to repay loans may have contributed to the increased importance of career skills to recent graduating classes. Improvement ratings by those surveyed in 1997 were very similar to the 1993 graduates, and showed that 44% of students were dissatisfied and concerned with the development of practical

⁸ Statistics provided by Office of the Registrar.

job skills, and 31% felt that way about of development of career plans. The consistency of these findings over the years suggests these are issues that warrant serious consideration.

Accumulated Debt. In 1991, 63% of recent graduates completed their undergraduate degrees without accumulating debt. Those who borrowed money averaged \$6,000 in debt. By 1993, only 48% of graduates were debt free, and the average debt of borrowers had increased to \$8,000. Although the percentage of students in debt increased only slightly over the next four years, the average amount of debt had increased to \$11,900 by 1997. The comments of the graduating classes of 1995 through 1997 showed the greatest level of concern about the accumulation of debt. In general, students graduating in 1989, 1991 and 1993 indicated little overall effect from debt, but comments of graduates from 1995 to 1997 indicated increasing effects on educational and occupational plans.

Enrollment in advanced degree programs. The proportion of students who continue their education within six months of graduation has apparently declined by half from 1993 to 1997. Comments by recent graduates indicate that 20% of those who borrowed money believed they would postpone plans for further education. This suggests that students who postponed seeking advanced degrees because of debt may have contributed to the overall decline in the number of students enrolled in higher degree programs within six months of graduation. However, analysis of enrollment patterns of all students shows that about 13% of 1995-97 graduates had enrolled in postgraduate programs, regardless of debt. The overall reasons for the decline in enrollment in graduate and professional programs remains unclear. In general, students who enrolled in advanced programs were more satisfied with many aspects of their undergraduate major programs. The helpfulness of their major advisor in career guidance, training received in creating original works and the quality of preparation for advanced study and a career were especially important. However, it is uncertain if these students happened to be advantaged in receiving superior guidance as undergraduates, or if they entered UCSC as superior students who knew how to seek out the necessary support and guidance for continued study.

For More Information. This report was developed for a general audience. If the specific concerns of a specific unit, board, committee, or division were not addressed in this report, campus representatives are invited to contact the authors to request further information.

APPENDICES

Appendix A	Survey of Graduates 1995-1997
Appendix B	Comparison of Sample and Population Demographic Characteristics
Appendix C	Colleges that have Accepted Recent Graduates
Appendix D	University Affiliations and Degree Programs
Appendix E	Fields of Study pursued by Recent Graduates
Appendix F	Recent Occupations

Survey of UC Santa Cruz Graduates

Educational Background

1.	College: ☐ Cowell	2.	Class level when you enrolled at UC San		3.	Major(s) Please	e list:
	☐ Cowell ☐ Stevenson ☐ Crown ☐ Merrill ☐ Porter ☐ Kresge ☐ Oakes ☐ Eight		□ Freshperson□ Sophomore□ Junior□ Senior		4.	When did you f at UCSC? Quarter: Year:	
	J	Ed	ucational Plans	and Objective	es		
1.	Please list the universities as	nd p	rograms to which yo	u applied for (Fa	11 19	95, 1996,1997)	admission.
	<u>University</u>		Degree Objective	Field of Study		Accepted?	Enrolled for Fall?
		_				Yes	☐ Yes
	-	_				☐ Yes	☐ Yes
		_				Yes	☐ Yes
		_				Yes	☐ Yes
		_				Yes	☐ Yes
		_				Yes	☐ Yes
		_				\textsup Yes	☐ Yes
		_				Yes	☐ Yes
2.	If you have applied for adm in the future, to which unive		es and programs wil	l you apply?	or pl	an on making ar	application
	University		Degree Objective	Field of Study			
		_					
		_					
		_					
		_					
		_					

uates Appendix A Occupational and Personal Information

1.	Are you currently employed? Selec	ct on	ly one.		
	 ☐ Yes, full-time ☐ Yes, part-time (but looking for fi ☐ Yes, part-time (but not looking f ☐ No, but seeking employment ☐ No, and not seeking employment 	for f nt	ull-time employment)		
	If you are a full-time student or not	t cui	rrently employed, please s	kip to	Question 8.
2.	What is your job title?				
3.	Which category best describes your	r <i>pri</i>	mary employer? Select or	ly on	e.
	☐ Business/Industry☐ Educational Institution		Non-Profit Organization Government		Self-employed Other: ()
4.	Which single category best describe	es yo	our job? Select only one.		
	□ Advertising/Public Relations □ Clerical □ Educator □ Engineer/Computer Scientist □ Financial Services □ Food Services □		Health Professional Interpreter/Translator Law Enforcement Legal Services Life Sciences Manager/Administrator		Personnel Professional Sales or Marketing Social Scientist Social Services Visual/Performing Arts Other:
5. one	Which one of the following statements:	ents i	best describes how you reg	gard y	our current job? Select only
	 □ Temporary job until a better one □ Temporary job to earn money to □ Job with possible career potentia □ Job with definite career potentia 	o do al		d gra	duate school)
6.	Which of the following statements b	best	describes your current job	? Se	lect only one.
	☐ It typically requires a college deposite of the second	egree lege	e, but isn't related to my madegree, but the degree was	ajor f	ield of study at UCSC
7.	What is your approximate annual in	ncon	ne? \$	-	
8.	Do you plan to be a long-term resident of the Santa Cruz area?	9.	Sex:		What is your current age?
	☐ Yes ☐ No		Female Male	-	
11.	Check the one or two categories tha	at <i>be</i>	st describes your ethnic id	entity	<i>'</i> .
	☐ Asian: () ☐ Black/African American ☐ Chicano		Latino Native American Pacific Islander		White/Euro-American Other: () Decline to State

1995-1997 Survey of Graduates Appendix A (1995) Your Undergraduate Education

Using the following scales, please evaluate the quality of the education you received at UC Santa Cruz, and how important each of the following areas were to you.

	Satisfaction Not applied to	NIA		<u>Im</u>	por	tan	<u>ce</u>						
	Not applicable Very Dissatisfied Somewhat Dissatisfied Neither Dissatisfied nor Satisfied Somewhat Satisfied	NA 1 2 3 4		So Mo	me ode	wha rate		mportant mportant		1 2 3 4			
	Very Satisfied	5						nportant		5			
				Sa	tisf	act	ion		<u>I</u> 1	npe	orta	inc	<u>e</u>
1.	Overall quality of your education		NA	1	2	3	4	5	1	2	3	4	5
2.	Degree of challenge and rigor of your courses		NA	1	2	3	4	5	1	2	3	4	5
3.	Availability of general education courses		NA	1	2	3	4	5	1	2	3	4	5
4.	Content of your general education courses		NA	1	2	3	4	5	1	2	3	4	5
5.	Content of your core courses		NA	1	2	3	4	5	1	2	3	4	5
6.	Availability of courses in your major		NA	1	2	3	4	5	1	2	3	4	5
7.	Overall quality of academic advising		NA	1	2	3	4	5	1	2	3	4	5
8.	Quality of your major advisor		NA	1	2	3	4	5	1	2	3	4	5
9.	Quality of faculty as teachers		NA	1	2	3	4	5	1	2	3	4	5
10.	Accessibility of the faculty		NA	1	2	3	4	5	1	2	3	4	5
11.	Opportunities for work with individual faculty (e.g., directed reading, research projects, intern	iships)	NA	1	2	3	4	5	1	2	3	4	5
12.	Communication and teaching skills of your TA	.S	NA	1	2	3	4	5	1	2	3	4	5
13.	Subject-matter knowledge of your TAs		NA	1	2	3	4	5	1	2	3	4	5
14.	Overall quality of your TAs		NA	1	2	3	4	5	1	2	3	4	5
15.	Opportunities for personal involvement in camactivities and events	pus	NA	1	2	3	4	5	1	2	3	4	5
16.	Opportunities for off-campus activities		NA	1	2	3	4	5	1	2	3	4	5
17.	Contributions of the UCSC residential colleges to your intellectual life and learning		NA	1	2	3	4	5	1	2	3	4	5
18.	Opportunities for involvement in athletics and	sports	NA	1	2	3	4	5	1	2	3	4	5
19.	Opportunities for attending sporting events		NA	1	2	3	4	5	1	2	3	4	5
20.	Development of long-term interest in sports or	fitness	NA	1	2	3	4	5	1	2	3	4	5
21.	Opportunities for acquiring specific job skills		NA	1	2	3	4	5	1	2	3	4	5
22.	Opportunities for developing career plans and	skills	NA	1	2	3	4	5	1	2	3	4	5
23.	Contribution of your education to an improved or economic status	social	NA	1	2	3	4	5	1	2	3	4	5

Appendix A (1996) Your Major Program

Using the following scales, please evaluate the importance to you of each of the following aspects of your major program. Rate your satisfaction level with each aspect on the right. If you had a double major, choose only one to evaluate.

							Major:		
	<u>Imp</u>	orta	ance	2				5	Satisfaction
1 Not important							1		Very Dissatisfied
2				_	ortant	ı.	2 3		Somewhat Dissatisfied Neutral
3	Ver				portant t		4		Somewhat Satisfied
		-	_		ortant		5		Very Satisfied
N	A N	lot A	App	licał	ole				
1	2	3	4	(5)	NA	1.	Quality of information and advising when selecting a major		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	2.	Helpfulness of your major advisor in course selection		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	3.	Helpfulness of your major advisor in career guidance		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	4.	Diverse points of view presented in major courses		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	5.	Availability of courses in your major field of study		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	6.	Wide selection of courses in your major		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	7.	Challenge and rigor of courses in your major		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	8.	Collegiality of other students in your major		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	9.	Quality of instruction by faculty in your major		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	10.	Contact outside of class with faculty in your major		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	11.	Quality of faculty as informal advisors/mentors		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	12.	Helpfulness of the staff in your Board Office		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	13.	Overall quality of your TAs		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	14.	Availability of informal study groups in your major classes		1 2 3 4 5
1	2	3	4	(5)	NA	15.	Quality of training received in creating original works		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	16.	Quality of training received in technical skills/methods		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	17.	Quality of training in general knowledge of the field		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	18.	Quality of training received in writing skills		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	19.	Quality of training received in collaboration/group skills		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	20.	Educational value of senior comprehensive requirement		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	21.	Accuracy/fairness of narrative evaluations in major		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	22.	Helpfulness of narrative evaluations for feedback		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	23.	Timeliness of receipt of narrative evaluations in major		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	24.	The size of classes in your major		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	25.	The coherence of the curriculum in your major		① ② ③ ④ ⑤
1	2	3	4	(5)	NA	26.	Quality of preparation for advanced study		① ② ③ ④ ⑤
(1)	(2)	(3)	(4)	(5)	NA	27.	Quality of preparation for your career		(1) (2) (3) (4) (5)

In reviewing your experiences at UCSC, to what extent do you feel the University has helped you to grow and develop? Using the following scales, evaluate how much you have grown and developed since coming to UC Santa Cruz in each of the following areas, and how important each area is to you.

	<u>Development</u>			<u>Im</u> j	ort	<u>ance</u>						
	No Development 1 Some Development 2 Moderate Development 3 Considerable Development 4 Exceptional Development 5			Not Important Somewhat Important Moderately Important Very Important Extremely Important				1 2 3 4 5				
		De	eve	lopi	ner	<u>t</u>	<u>I</u> 1	mpo	<u>orta</u>	nce	<u> </u>	
1.	Experience and skill in relating to others	1	2	3	4	5	1	2	3	4	5	
2.	Clear and effective speaking skills	1	2	3	4	5	1	2	3	4	5	
3.	Clear and effective writing skills	1	2	3	4	5	1	2	3	4	5	
4.	Ability to create original works or projects	1	2	3	4	5	1	2	3	4	5	
5.	Understanding different cultures, philosophies, and ways of life	1	2	3	4	5	1	2	3	4	5	
6.	Self-understanding and a sense of self-confidence	1	2	3	4	5	1	2	3	4	5	
7.	Sense of personal identity	1	2	3	4	5	1	2	3	4	5	
8.	Personal philosophy of life	1	2	3	4	5	1	2	3	4	5	
9.	Awareness of moral and ethical principals	1	2	3	4	5	1	2	3	4	5	
10.	Spiritual or religious values	1	2	3	4	5	1	2	3	4	5	
11.	Ability to cope with change and/or pressure, <i>e.g.</i> , interpersonal relations or new job demands	1	2	3	4	5	1	2	3	4	5	
12.	Career plans and skills	1	2	3	4	5	1	2	3	4	5	
13.	Acquisition of specific job skills	1	2	3	4	5	1	2	3	4	5	
14.	Improved economic or social status	1	2	3	4	5	1	2	3	4	5	
15.	A long-term interest in sports or fitness	1	2	3	4	5	1	2	3	4	5	
16.	Ability to set and achieve personal goals	1	2	3	4	5	1	2	3	4	5	
17.	Ability to lead/guide others	1	2	3	4	5	1	2	3	4	5	
18.	Ability to get along with people of different backgrounds or ethnic groups	1	2	3	4	5	1	2	3	4	5	
19.	Ability to work as a member of a team	1	2	3	4	5	1	2	3	4	5	
20.	Personal accountability and responsibility	1	2	3	4	5	1	2	3	4	5	
21.	Intellectual curiosity	1	2	3	4	5	1	2	3	4	5	
22.	Understanding the workings of government	1	2	3	4	5	1	2	3	4	5	
23.	Making judgements about international problems	1	2	3	4	5	1	2	3	4	5	
24.	Critical thinking skills (e.g., analyze information, synthesize concepts and draw inferences)	1	2	3	4	5	1	2	3	4	5	

Comments

1.	What was the most	difficult problem you encountered as a student at UCSC?
2.	How much money of educational and occ	did you borrow to finance your undergraduate education? Has this affected your supational plans?
	\$	Amount
3.	If you were to start reasons. Yes Uncertain No	over again, would you still choose to attend UC Santa Cruz? Please explain your
Na	me (optional)	

Appendix B

Comparison of Sample and Population Demographic Characteristics

Characteristic	Number in <u>Sample</u>	Percent <u>Sample</u>	age in <u>Population</u>
College Cowell Stevenson Crown Merrill Porter Kresge Oakes Eight	104 98 118 77 117 110 74 114	13% 12% 15% 10% 14% 14% 9% 14%	12% 12% 12% 11% 14% 15% 11%
Entry Level Freshperson Sophomore Junior Senior	503 33 270 4	62% 4% 33% 1%	55% 4% 39% 2%
Division Arts Humanities Natural Science Engineering Social Science Interdisciplinary Individual	83 181 160 29 362 0	10% 22% 20% 4% 44% 0% 0%	12% 24% 18% 2% 43% 1% 1%
Gender Female Male	528 278	66% 34%	61% 39%
Ethnicity American Indian Asian/Pacific Islander Black/African American Chicano Latino White/Caucasian Other	13 94 19 37 28 534 37	2% 12% 3% 5% 4% 70% 5%	1% 13% 3% 9% 4% 68% 3%

Appendix C

Universities and colleges that have accepted recent UC Santa Cruz graduates:

Academy of Art College Illinois State University

American University Indiana University, Bloomington Amherst College John F Kennedy University John Hopkins University Bastyr College Bates College Lewis And Clark College Baylor College of Medicine Louisiana State University

Baylor University Loyola Law School

Boston College Loyola Marymount University

Lucas Arts Institute **Boston University**

Brigham Young University Massachusetts Institute of Technology

Brown University Michigan State University

Cabrillo College Mills College

California Institute of Integral Studies Monterey Institute of International Studies

National University California Institute of the Arts

National College of Naturopathic Medicine California Polytechnic State, San Luis Obispo

Oberlin College

California School of Professional Psychology New School for Social Research

California State University, Chico New York University California State University, Fresno Northern Arizona University California State University, Fullerton Northwestern University

Pacific Graduate School of Psychology California State University, Humboldt

California State University, Long Beach Pennsylvania State University California State University, Monterey Pepperdine University California State University, Northridge Portland State University

California State University, Sacramento **Rutgers University**

California State University, San Bernardino San Francisco State University California State University, San Diego San Jose State University California Technical University Santa Barbara City College

Case Western Reserve University Santa Clara University Chapman University Santa Clara University, Law Santa Monica College Of Design Clark University

Columbia University Sonoma State University Cornell University Stanford University Dartmouth College Stanford University, Law

Dominican College SUNY, Albany **Duke University** SUNY, Binghamton SUNY, Buffalo Evergreen College

Fuller Theological Seminary The Joe Kubert School Of Cartoon & Graphic Art

George Washington University **Tufts University**

Golden Gate University Tulane University of Louisiana

Harvard University Tulane Medical School Idaho State University University of Arizona

California State University, Hayward

Appendix C, Continued

University of California, Berkeley

University of California, Berkeley- Boalt Hall

University of California, Davis

University of California, Hastings Law School

University of California, Irvine

University of California, Los Angeles

University of California, Los Angeles, Law

University of California, Riverside

University of California, San Diego

University of California, San Francisco

University of California, Santa Barbara

University of California, Santa Cruz

University of Chicago

University of Colorado, Boulder

University of Colorado, Law

University of Colorado, Pharmacy

University of Florida

University of Hawaii, Manoa

University of Health Science

University of Illinois, Urbana

University of Kentucky

University of Maine, Orono

University of Maryland

University of Massachusetts, Amherst

University of Michigan

University of Minnesota

University of Montana

University of Nebraska

University of Nevada, Las Vegas

University of Nevada, Reno

University of Oregon

University of the Pacific

University of the Pacific, McGeorge Law

University of San Diego

University of San Francisco

University of South Carolina

University of Southern California

University of Texas, Austin

University of Utah

University of Vermont

University of Virginia

University of Virginia Medical School

University of Washington

University of Wisconsin, Madison

University of Pennsylvania

University of Wyoming

Universitat Potsdam, Germany

Vanderbilt University

Vermont University

Washington State University

Weizmann Institute of Science, Israel West Georgia College

Western Oregon State

Yale University

Appendix D

University Affiliations and Degree Programs of Recent UCSC Graduates

School	# Enrolled	Degree Programs
Academy of Art College	1	MFA
Amherst College	1	Ph.D.
Bastyr University	1	ND
Brigham Young University	1	MBA
California Institute of Integral Studies	1	MA
California Institute of the Arts	1	MFA
California School of Professional Psychological	gy 1	Ph.D.
California State University, Chico	3	2 MA, Credential
California State University, Fullerton	1	MPA
California State University, Long Beach	1	MA
California State University, San Bernardino) 1	Credential
California State University, San Diego	1	MA
California State University, Sonoma	1	Credential
Chapman University	1	Credential
Cornell University	1	Ph.D.
Dartmouth College	1	Ph.D.
Dominican College	1	Credential
Duke University	1	Ph.D.
Fuller Theological Seminary	1	MA
George Washington University	1	Unknown
Golden Gate University, Law School	1	JD
Harvard University	1	MA
Idaho State University	2	MA, MS
Indiana University, Bloomington	1	MA
John F Kennedy University	1	MFCC
John Hopkins University	1	Ph.D.
National University	1	Credential
Northwestern University	1	MFA
Pepperdine University	1	MA
San Francisco State University	2	MA, MS
San Jose State University	9	7 MA, MLIS, Credential
Santa Clara University	2	2 MA
Santa Clara University, Law School	2	JD, JA
Stanford University	2	2 MA
SUNY, Binghamton	1	Ph.D.
The Joe Kubert School Of Cartoon & Grap	ohics 1	Certificate
University of California, Berkeley	4	2 Ph.D., MA, MSW
University of California, Berkeley- Boalt H	all 3	3 JD
=		

Appendix D, Continued

School	# Enrolled	Degree Programs
University of California, Davis	2	MD, D.VM.
University of California, Hastings Law	1	JD
University of California, Los Angeles	4	2 MA, 2PHD.
University of California, San Diego	1	Ph.D.
University of California, San Francisco	1	Ph.D.
University of California, Santa Barbara	1	Ph.D.
University of California, Santa Cruz	20	2 Ph.D., 13 MA, 5 MS
University of Connecticut	1	Ph.D.
University of Florida	1	MS
University of Health Sciences	1	DO
University of Massachusetts, Amherst	1	MS
University of Texas, Austin	1	MA
University of the Pacific	1	MS
University of the Pacific, McGeorge Law	1	JD
University of Vermont	1	Ph.D.
Universitat Potsdam, Germany	1	Ph.D.
University Southern California	3	2 MA, MSW
Vanderbilt University	1	Ph.D.
West Georgia College	1	MS
	105	

Appendix EFields of study being pursued by the 1995-1997 UC Santa Cruz graduates:

Field of Study	Number of Graduates
Education	26
Biology and Biophysics	9
Law	8
Business/Economics	5
Psychology/ Clinical Psychology	5
Creative Writing/ English	4
Anthropology	3
Literature and Classics	3
Geology/Geophysics	3 3
Medicine	3
Sociology	3
Art	2
Computer Science or Engineering.	2 2 2 2 2
History	2
Neuroscience	2
Social Welfare	
Accounting	1
Administration of Justice	1
Asian American Studies	1
Ecology	1
Labor Studies	1
Library Science	1
Linguistics	1
Marine Sciences	1
Physics	1
Psycholinguistics	1
Public Administration	1
Public Health	1
Radio/TV/Film	1
Theology	1
Tibetan Studies	1
Urban Planning	1
Veterinary Medicine	1

Appendix FRecent Occupations

The following list contains the types of occupations held by the 1995-97 non-enrolled graduates.

	Number of Graduates			
Occupation Six Months After Graduation	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>Total</u>
Educator	30	33	34	97
Clerical	26	27	17	70
Sales or Marketing Professional	19	20	22	61
Food Services	24	13	6	43
Social Services Professional	14	18	8	40
Engineer/Computer Scientist	18	10	9	37
Manager/Administrator	13	9	10	32
Life Sciences Professional	8	8	13	29
Visual/Performing Arts	5	6	9	20
Advertising Public Relations	9	4	6	19
Health Professional	7	4	6	17
Financial Services Professional	4	4	5	13
Legal Services/Law Enforcement	3	3	2	8
Personnel Professional	2	0	3	5
Social Scientist	3	0	2	5
Other	29	28	20	77
Total	214	187	172	573