As numerous planning documents make clear, including the Millennium Report (September 1998) and our WASC Preparatory Report, at UC Santa Cruz we like to think of ourselves as a research university with an “uncommon commitment” to undergraduate education. We do not imagine that we have at every moment and in every way fulfilled our ambition to provide a first-rate education to undergraduate students. Yet, we are gratified at the recognition given by the visiting committee and by the WASC commission to both our sincere efforts and our actual successes.

Continuing through Periods of Change

Maintaining our excellence in undergraduate education has required effort. Enrollment pressures have been great, and, as we outlined in the first essay, the number of undergraduate students served at UC Santa Cruz has dramatically increased since the last WASC review. Between 1992-93 and 2002-03, undergraduate enrollment grew by 55 percent, transforming UC Santa Cruz from a small to a medium-size campus. Fall freshman enrollment in 2003 represented a 62 percent increase over the freshman enrollment of 1997-98. Enrollment growth was concentrated in the period 1997-2002, as shown in Exhibit H.

Along with an increase in the size of the undergraduate student body there have been substantial programmatic changes. The Baskin School of Engineering was created in 1997. Substantial growth occurred in the Arts and Social Sciences, and new major programs have been developed in Physical and Biological Sciences. Enrollments did not grow as rapidly in the Humanities as in other divisions. Exhibit H presents a historical view of the growth and development of undergraduate majors during this period.

Another change for UC Santa Cruz has been a shift in the way student course work is evaluated. A distinctive feature of UC Santa Cruz’s early undergraduate programs was the reliance on narrative evaluations, rather than on summary letter grades, as the principal means by which faculty reported their assessments of student learning. UC Santa Cruz had been granted a variance from UC academic policy to allow students to take all of their classes – rather than just one-third of them – in the ‘Pass/No Pass’ (P/NP) grading system. As a result, no UC Santa Cruz undergraduate student had a traditional Grade Point Average (GPA). Academic standing for undergraduate students was defined in terms of minimum progress toward the degree – a measure of the rate at which they earned credits.

In 1996, a review of the campus’s undergraduate grading policy by the Academic Senate resulted in the decision that students should have the option of earning traditional letter grades in all of their classes in addition to receiving narrative evaluations of their work. Beginning with the entering class of 1997, students who elected letter grades in at least two thirds of their credits had a UC Santa Cruz GPA based upon their letter grades. (Students who elected letter grades in less than two-thirds did not have a GPA.) The percentage of students requesting letter grades and GPAs rose steadily after this policy was adopted.

With continued growth in undergraduate enrollment, many lower division courses grew substantially in size, making it difficult for faculty to provide personalized narrative evaluations of student work in large courses. In 1999, the faculty revisited the assessment policy in a campus-wide debate about the role of the campus grading policy in perceptions of the academic rigor of our undergraduate program.
and the value of the narrative evaluation system. The result was a revision of the grading policy and a reaffirmation of the narrative evaluation system, reframed as a performance evaluation system. Performance evaluations now provide context for the summary letter grade and give supplemental information deemed relevant by the faculty for the particular course. Beginning with the entering class of 2001, undergraduates have by default received letter grades in all courses. The option for requesting P/NP grades has been limited to one-quarter of a student’s credits, and some majors impose lower limits. As a result, nearly all of the current students have both term and cumulative GPAs defined in the traditional way. At the same time, the standard UC academic standing regulations were adopted for these students.

In contrast to positive changes in the academic culture of UC Santa Cruz, there is concern that the quality of undergraduate education has been strained by enrollment growth and budget cuts. In 2003-04, shortfalls in state support for the university led to a 13 percent cut to the permanent budget of the campus. Academic support programs and other campus units received cuts of this magnitude, though the central administration managed to limit the immediate effect on direct instructional programs to an average of three percent at the cost of severely reducing flexibility for future growth. As a result, we face a budgetary future very different from the one in which we began the WASC process.

Two questions

The present essay is organized to address two questions – one briefly and one in depth. First, we ask: do the data indicate that recent enrollment pressures and resource limitations have eroded the excellence of UC Santa Cruz’s undergraduate education? Given the amount of change in recent years, one may worry about possible erosion in our ability to maintain our pedagogical traditions. Because the Preparatory Report devoted substantial attention to the question of our continued excellence, we touch only briefly on it. The second question, and the one that preoccupies us, centers around the mechanisms for preserving the excellence of our undergraduate programs, with an eye to preserving the students’ active engagement in learning.

HAVE WE MAINTAINED EXCELLENCE?

Several indicators suggest that UC Santa Cruz has managed to come through the period of rapid growth and of diminished resources with its ability to deliver an excellent undergraduate education still intact. For example, a visit to the office of the Vice Provost for Academic Affairs would show that the large majority of external reviews conducted over the past ten years have praised the undergraduate educations delivered by different programs. For department after department, teams of visiting experts note the outstanding programs offered to undergraduates.

Student opinions

The laudatory opinions of visiting experts are by and large echoed by our own students. Student opinions, taken by themselves, do not necessarily insure quality; but considered in concert with other data, they do provide the basis for strong inferences. Furthermore, when the opinions are gathered by varying methodologies, inferences become increasingly plausible.

One source of student opinion concerns the assessment of individual professors and courses. UC Santa Cruz regularly collects information through mandatory course evaluation. While we have not yet been able to make systematic use of aggregated data from course surveys in program assessments, informal inspection of data shows that, by and large, UC Santa Cruz students appreciate their professors and their courses.

A second source of student opinion comes from the surveys of graduating seniors mentioned in the previous essay on the campus’s educational effectiveness approach. The most relevant data on this point are from the survey of 2004 graduating seniors, which asked students to comment on their experience in their major programs of study. This data is under analysis and can be discussed during the February team visit.

A third source of data about student opinion is the University of California Student Experience Survey (UCUES) administered on the UC Santa Cruz campus since 2002. As seen in the UCUES materials contained in Exhibit I, for most of the questions regarding frequency of contact and
satisfaction with the accessibility of faculty, including for career advising and other non-academic matters, UC Santa Cruz students score above the general UC average. We anticipate UCUES will continue to provide a way to monitor these indicators of effectiveness.

A final source of data about student opinion derives from the National Survey of Student Engagement (NSSE), administered to groups of first year and senior students in the winters of 2000 and 2001. The responses to individual questions were averaged by the organization administering the survey to provide scores on five factors relevant to student engagement: 1) level of academic challenge; 2) active and collaborative learning; 3) student interactions with faculty members; 4) enriching educational experiences; and 5) supportive campus environment. For each factor, composite scores were calculated separately for first year students and for seniors.

The NSSE data, summarized in Table 1 of Exhibit I, show that, in 19 out of 20 cases, UC Santa Cruz undergraduates express more satisfaction with their education than do students at other research-intensive institutions. Furthermore, in terms of the level of academic challenge and supportive campus environment, freshmen and seniors in both 2000 and 2001 are all more satisfied than one would predict on the basis of UC Santa Cruz’s institutional profile. Senior (but not first year) students in 2000 and 2001 were also above the expected value in their satisfaction with active and collaborative learning.

Applications

Students are notorious for voting with their feet as well as with their voices. At the time of the last review, the campus was worried about decreasing enrollments and about a concern among applicants about the academic rigor of UC Santa Cruz. Today, despite nearly doubling our undergraduate enrollment to roughly 14,000 students, we are unable to offer places to all UC eligible applicants. Yield rates for admission have remained stable, but applications to our campus have increased more rapidly than to the UC system as a whole.

Retention and Graduation

Our retention and graduation rates are also improving. While UC Santa Cruz’s most recent first to-second year freshman retention rates (86 to 87 percent) and most recent four year (48.6 percent) and six-year (65.4 percent) graduation rates remain below the mean for the UC system, they are well above the national mean for comparable institutions. (For example, UC Santa Cruz’s 1996 cohort six-year graduation rate was 67 percent compared to 59 percent for NCAA Division I schools.) See the recently completed Retention and Graduation Update for 2003-04.

Diversity

A significant indicator of excellence is the diversity of our student body. Since 1994, the percentage of racial and ethnic minority students enrolled at UCSC has increased steadily. Several factors may contribute to UC Santa Cruz’s ability to attract ethnic minority students. One factor is the changing demographics of the State of California. Additionally, under the leadership of Vice Chancellor for Student Affairs Francisco Hernandez, UC Santa Cruz has implemented early academic preparation programs to help increase the pool of UC eligible students from under-represented groups as well as aggressively recruiting applicants from these groups. The development of new major programs (e.g., engineering majors and Biomolecular Engineering) has likely had a positive effect on admissions yield from these groups. The ending of many formal affirmative action programs across UC in 1996 has probably also contributed to the increase in diversity on our campus as students who previously would have been admitted to the most selective campuses [UCB and UCLA] have found places at other campuses, including UC Santa Cruz.) We currently have several programs in place to provide financial and mentoring support to underrepresented minorities in our undergraduate programs. One example is the UCLEADS (University of California Leadership Excellence through Advanced Degrees) program. UC Leads is a two-year research and mentor program to prepare disadvantaged undergraduates in the sciences for graduate school. Finally, UC Santa Cruz’s successful efforts to attract and retain a diverse faculty1 and to incorporate issues of diversity into its

1 UC Santa Cruz’s permanent faculty is approximately 35 percent female and 24 percent minority. While these rates fall below potential utilization given the availability of Ph.D.s in all academic divisions, it places our faculty among the most diverse in the UC system. UC Santa Cruz has for many years followed
curriculum may also contribute to its reputation as a campus that welcomes students from many different backgrounds. An indication of success in incorporating the value of diversity into the educational program at UC Santa Cruz in the results of the NSSE survey, which revealed that UC Santa Cruz students scored very high on the NSSE measure of “conversations across difference”.

**HOW CAN WE MAINTAIN EXCELLENCE?**

The principle of “shared governance” in the University of California dictates that the Academic Senate has jurisdiction over the criteria for admission, the curriculum, and the criteria for graduation, while the administration has jurisdiction over resources, human and otherwise. At UC Santa Cruz the practice of shared governance is stronger than at many other UC campuses. In the past the UC Santa Cruz administration and Senate have often attempted to work collaboratively toward the goal of assuring educational effectiveness. Currently, working very closely together, the VPDUE and specific Senate committees have identified five specific foci, attention to which should maintain the excellence and integrity of undergraduate education. Specifically, over the next 18 to 24 months, we should: a) increase opportunities for research and internships; b) increase opportunities for early faculty-student interactions; c) continue to reflect on the senior exit requirements, including the capstone experience; d) reconsider how to best review and improve the effectiveness of the General Educational Requirements that all undergraduates must satisfy; and e) improve academic advising to insure that undergraduates develop meaningful academic goals and achieve them at UC Santa Cruz.

**Increased opportunities for research and internships**

The 2003 UC Taskforce on Instructional Activities reflected (p. 6):

“[T]he hallmark of a research university education at any level is the experience offered students to participate with faculty in inquiry-based learning – that is, the ability to put the knowledge and skills learned in the classroom to use through research, scholarship and creative discovery… Accomplishing instructional activities in these settings is both a science and an art. Though the tools for research, scholarship and creative discovery can often be taught in a straightforward manner, the thought processes that one uses to address these challenges are ones that cannot be so easily codified. Rather, the needed skills, attitudes and approaches must be developed through mentoring within intense and highly-interactive small-group settings involving faculty and students, often in one on one intellectual exchanges.”

What the taskforce noted for research opportunities applies with equal force to internships and field study. Indeed, it is often difficult to make distinctions between the activities pursued under the rubrics of ‘research project’, ‘field study’, and ‘internship’. All can serve the educational objectives of engagement with inquiry-based learning, application of knowledge and skills in new contexts, and integration of previous work. Some can also serve the personal and institutional mission of community service, and provide students with skills and experience useful in their post-graduate careers.

Since its founding, UC Santa Cruz has actively encouraged its undergraduates to participate in research and internships. The relative scarcity of graduate programs in the campus’s first two decades of existence combined with the faculty’s philosophical commitment to the development of undergraduate talent, with the result that there were many opportunities for UC Santa Cruz undergraduates to conduct research with faculty – opportunities that were usually reserved elsewhere for graduate students. Although UC Santa Cruz has now significantly expanded its graduate programs, the institution’s commitment to undergraduates remains high. Indeed, it is assumed in several programs that effective laboratories include a mix of undergraduate students, graduate students, and faculty and perhaps some post doctoral scholars, with the graduate students participating in the training of undergraduates and the undergraduates supporting the research of graduate students (and
often post doctoral students) as well as of faculty. Currently every academic department offers course credit for research that undergraduate students conduct with and under the supervision of professors as well as course credit for internships and field studies. The UC undergraduate deans are currently developing guidelines for classifying such courses to allow institutional research to better report on the distribution of student credits earned in these types of experiences.

Several departments have highly developed field-study programs. Within the Social Sciences Division, the Community Studies Department requires all of its undergraduate majors to undertake a full-time, six-month internship with a community organization, as part of its core curriculum. Each year the Field Studies Coordinator in the Psychology Department helps place psychology majors in schools, law enforcement agencies, corporations, and research organizations, arranging for each intern to have both a field supervisor and an academic supervisor. As Exhibit J shows, there are numerous similar opportunities, such as the “Marine Ecology Quarter”, available to students in the Physical and Biological Sciences. In addition, in a program that is administered by one of the residential colleges, the Writing Program places both lower and upper division students in internships with magazines, newspapers, publishing houses, and civic organizations.

Today’s undergraduate students make extensive use of the many opportunities for research with faculty and for internships. From the NSSE and UCUES surveys, and from the 2003 Survey of Graduating Seniors, it is clear that our undergraduates have a strong interest in research and internship experiences. Over 1400 students participate each year in UC Santa Cruz’s field programs, and it is estimated that UC Santa Cruz students provide a million person hours a year to organizations in Santa Cruz and elsewhere.

While there is no question about the number of undergraduate students who wish to take part in research and fieldwork, there are also strong indicators, but no certainty, of the high impact of the experiences on student learning. Unlike most institutions, UC Santa Cruz organizes many of its internships within academic departments rather than within student services. The supervision of internships within the departments means that our programs tend to include the characteristics that are currently thought by the faculty to enhance the academic value of internships and research experiences for undergraduates [Cf. the report in Exhibit J].

The literature on experiential education indicates that the academic value of internships and research experiences increases when they meet the following criteria:

- There is structured preparation for the experience before the students undertake the work.
- The students have structured opportunities for reflection on their experience.
- There is faculty supervision of the work.

An outcome of this review is our realization that we need to assess more precisely than we currently do the effectiveness of our field studies programs in this regard, by asking every department and program to describe the ways in which its research and field opportunities conform to the three criteria above. We should also ask departments to document their successes and failures in terms of research and internship opportunities as part of their periodic external reviews. We are also seeking to regularly incorporate questions about participation in, and satisfaction with, research and field placement in the annual Graduating Senior Survey. Data on participation and evaluation of the research experience of the 2003 graduates is included in Exhibit I.

Hand-in-hand with improved accountability goes improved coordination. We have identified three ways to improve coordination. First, some group on campus needs to undertake an annual analysis of the data provided by the Graduating Senior Surveys and by the departments. Comparative statistics might help individual departments sustain their accomplishments even as support services become more taxed. Exactly what group would undertake the task is not yet clear; perhaps the Office of Institutional Research would be appropriate, or an ad hoc group of field studies coordinators. Second, we would like to see research and field courses systematically categorized by numbering or other designations across departments to enable students,
Increase opportunities for early faculty-student interactions

While research and internship opportunities allow advanced undergraduate students to have close individual contact with faculty members, other strategies are needed to ensure that the beginning students have personal access to faculty members. A natural consequence of the growth in undergraduate enrollment has been an increase in the size of many lower-division courses. Although increases have been limited by constraints imposed by our classrooms, most of the classes taken by first-year students are large-lecture format courses.

Three strategies help ensure first-year students contact with individual faculty and staff. Two of the strategies have been in place for a long time. One is new.

First, most freshman and many sophomores at UC Santa Cruz live in the residential colleges. One of the goals of the residential colleges is to facilitate informal interaction between the faculty and students. The faculty who serve as college provosts devote a good deal of time to interacting with the students in their colleges. College programming has also included events which bring students together with faculty in informal settings: in discussion groups after lectures in the college; having students invite faculty into their residence halls for informal discussion; organizing discipline-based “roundtables” where faculty have dinner with a group of students to discuss their research and career paths; and working to include faculty and their families in “College Night” dinners. One outcome of this review is an invitation to the Council of Provosts to review past efforts and to identify effective tactics for bringing faculty and students together.

Second, all entering freshman are assured of at least one small seminar course in their first year. The required college writing seminars (the “core courses”) in their first term are limited to seminar sections of 20-24 students. While these courses clearly contribute to the engagement measured by NSSE for the first-year students, they are primarily taught by lecturers with expertise in this type of course and not by permanent research faculty. In addition, by design, the non-disciplinary character of these classes does not reflect the character of the programs in which students will eventually do their major work.

Beginning in 2003-04, UC Santa Cruz adopted a third strategy: the Freshman Discovery Seminar. Modeled on successful programs at UCB and UCLA, the seminars at UC Santa Cruz provide one or two units of credit and are taught by research faculty. The objectives of the program are to enable lower-division students to get earlier exposure to the research conducted by our permanent faculty in a seminar setting. In 2002-03, 30 such seminars were offered, and in 2003-04, 37 were offered. An overview of the program is provided in Exhibit K.

In 2004-5, these seminars will be offered again as part of the pilot program. We anticipate that CEP will review the pilot program this year. The interim Campus Provost/Executive Vice Chancellor will strongly encourage the inclusion of such courses in routine curriculum planning by all division to meet obligations placed on all campuses by UCOP.

Continue to reflect on the senior exit requirements, including the capstone experience

All undergraduate major programs at UC Santa Cruz are required by Academic Senate regulations to administer a comprehensive examination or senior thesis requirement for their students. The current catalog tells students: “Typically, in your senior year you must satisfy the comprehensive requirement for your major by satisfactorily completing a comprehensive examination or an equivalent body of work … [that] reflects comprehensive understanding of subject matter may be accepted in the place of a comprehensive examination” (p. 33).

Originally the senior comprehensive requirement was established to determine that graduates have
achieved the program’s outcomes in the absence of a GPA based on letter grades in course work. In other words, the historical motivation for senior exit requirements was “quality assurance.” Only those students who showed that they had mastered the material of their discipline were allowed to graduate. And, presumably, pass rates on the comprehensive requirement would be a measure of the program’s educational effectiveness.

Almost immediately, however, the senior exit requirement also evolved into something that was meant to contribute to the student’s education as much as to assess it. The Boyer report on undergraduate education in the research university recommended that an undergraduate degree should culminate with a “capstone experience”. It provides the following characterization of this notion, now a standard part of the degree program at many research universities:

1. Senior seminars or other capstone courses appropriate to the discipline need to be part of every undergraduate program. Ideally the capstone course should bring together faculty members, graduate students, and senior undergraduates in shared or mutually reinforcing projects.

2. The capstone course should prepare undergraduates for the expectations and standards of graduate work and of the professional workplace.

3. The course should be the culmination of the inquiry-based learning of earlier course work, broadening, deepening, and integrating the total experience of the major.

4. The major project may well develop from a previous research experience or internship.

5. Whenever possible, capstone courses need to allow for collaborative efforts among the baccalaureate students.

During 2003-04, as part of the WASC review process, the Committee on Educational Policy conducted a review of the Comprehensive/Senior Exit Requirement in every academic program. Their review drew on the data from the 2003 graduating student survey as well as comments solicited from every department. Their report and an inventory of the ways in which the requirements may be satisfied in each program constitute Exhibit L.

The report shows heterogeneity in the senior exit requirement. Faculty-supervised senior theses and individual projects are available in all programs and are often used to satisfy the senior exit requirement. However, written comprehensive examinations – and eventually GRE subject exams – have become a common way for students to satisfy the requirements in programs with large undergraduate enrollments. The CEP review was, in fact, triggered by requests from some departments who sought to eliminate it as part of a strategy for coping with balancing the resource demands of increased undergraduate enrollments with graduate education.

Based upon their review of student and faculty satisfaction with particular forms of comprehensive/senior exit requirements, CEP reached a clear conclusion: comprehensive examinations are the least effective implementations of the senior exit requirement, while course-based capstone requirements and senior theses were highly valued by both the students and the faculty. CEP recommends that departments who use comprehensive examinations consider shifting to some other form of exit requirement. They further insist that the senior exit requirement be examined in the regular reviews of major programs as part of external reviews of departments. Two programs so far have changed or are changing their assessment mechanism.

Participation by advanced undergraduates in the graduate curriculum of a related program provides another effective way of enhancing undergraduate capstone experiences.

Preparation of the required Inventory of Educational Effectiveness Indicators (Exhibit E) for the WASC review has permitted us to continue along the lines of the CEP inquiry. The inventory asks two basic questions:

- Have formal learning outcomes been developed?
- Other than GPA, what measures/indicators are used to determine that graduates have achieved the stated outcomes for the degree
In the UC Santa Cruz situation, the senior comprehensive requirement provides a ready response to the second question, at least for undergraduate degree programs. The chairs of these programs have been requested to respond to the first question to provide explicit formulations of the objectives implicit in the design of their degree requirements and senior comprehensive requirements. An outcome of our reflection in this review, however, as given rise to some additional questions as we saw a tension between the use of these assessments as measures of program effectiveness and as assessments of individual students’ learning:

- How can programs provide capstone experiences in ways that both enrich the students’ educational experiences and serve as valid assessments of program success?
- What are the most cost-effective ways to assess student competence in different disciplines that can also enhance the students’ perceptions of educational value?

We intend to engage the UC Santa Cruz community in meaningful discussions about the value of articulating educational outcomes in overall assessment of learning. We will begin by examining the outcomes assessed by the various senior comprehensive requirements. With respect to providing rich capstone experiences, we would like to explore ways in which advanced graduate students might be enlisted to be further involved in the undergraduate learning process, to the benefit of both the undergraduate and the graduate student’s training.

With respect to developing assessable educational objectives and outcomes, the VPDUE has identified several specific steps for consultation aimed at getting departmental and program faculty to provide brief summaries of the educational objectives for their programs. The goal is that all programs could achieve something like the level of explicitness already attained by the Departments of Computer Engineering and of Electrical Engineering as part of their ABET (Accreditation Board for Engineering and Technology) accreditation process. VPAA George Brown working with the Academic Senate has proposed to incorporate attention to these objectives in the program review process. The review process could then lead to the development of more concrete measures of the outcomes associated with these objectives, as faculty understand the benefits of collecting data on outcome measures of educational effectiveness.

Currently, we know that 13 percent of UC Santa Cruz undergraduates go on to advanced degree programs within 6 months of graduation, and that about half of our graduates eventually go on to professional or graduate school. We also know that we would rank 15th among the more than 60 institutions in the Association of American Universities survey in terms of the percentage of our undergraduates who went on to earn doctoral degrees between 1991 and 1995. At present we have little systematic data about these trends measures for individual divisions or departments.

**Monitor General Education requirements**

The current campus General Education requirements were adopted in 1985. They insure that each undergraduate student completes some work in each of the major areas of the curriculum (Arts & Humanities, Sciences & Engineering, and Social Sciences) while achieving objectives in writing and mathematical skill and engagement with ethnic studies and the arts. A summary of their objectives is given in Exhibit M. In 1998, a committee of the Academic Senate recommended revisions that would allow students more freedom to develop focal clusters within the current framework, and would clarify the role of the college core courses as part of the lower division writing sequence. This revision was narrowly defeated by the entire Academic Senate, apparently due to two concerns. The flexibility introduced by the revision would have diminished the required level of exposure to the sciences relative to the current system. For some impacted majors, there was also concern that the Writing Intensive (W) requirement, intended to ensure that all students received writing instruction in their major disciplines, was not sustainable.

Since that time, the Senate’s Committee on Educational Policy (CEP) has pursued an evolutionary strategy for renewal by reviewing and renewing individual components of the GE program. They have clarified the objectives of the Ethnic
Studies requirement and reviewed the courses that carry the designation. They altered the relation between the “Writing in the Disciplines” requirement (W) and the lower-division writing curriculum following a review of the capacity of the courses that carried the designation. Most recently, the Academic Senate has approved their revision of the general education requirements in lower-division writing that improves the articulation between the first writing seminar delivered through the residential colleges (the “core courses”) and the second writing course provided by the Writing Program. Under an instructional improvement grant provided by the Committee on Teaching, the Council of Provosts and the Writing Program are developing educational objectives for courses and an improved placement process that will insure that students get instruction in writing appropriate to their initial level of skill in college writing.

CEP is currently reviewing the objectives of the mathematics (Q) requirement and how the courses that carry that designation incorporate those objectives. These preparatory steps provide a foundation for deciding whether to undertake another comprehensive review of the role of GE. The Center for Studies in Higher Education at UC Berkeley has recently formed a task force to examine the role of General Education at the UC level. The work of that taskforce (in which two UC Santa Cruz faculty will participate) will likely provide further stimulus for CEP to return to the question of reviewing the objectives of the general education requirements and assessing their role in undergraduate degree requirements.

**Improve Academic Advising**

The 1994 WASC Accreditation review pointed out the need for UC Santa Cruz to address several issues of coordination in academic advising. They made six specific recommendations:

- Clarify the goals and purposes of academic advising at all levels of the undergraduate experience.
- Define the different roles of staff, faculty, and peer advisors … in both the Colleges and the [departments] with respect to the undergraduate curriculum.
- Develop a consistent campus policy for the recruitment, selection, and training of staff advisers and preceptors.
- Coordinate all academic advising, including that which takes place in the various first-year and transfer orientations….
- Develop an advising brochure or expanded section in *The Navigator* that provides a clear road map to campus advising services.
- Analyze the technical support needed to facilitate effective academic advising campus-wide, and allocate appropriate resources to achieve those ends.

The review acknowledged that there were many competent and committed people involved in academic advising in various campus units. The effectiveness of their efforts had been diminished by lack of coordination among those units and poor technical support for the processes. Since that review several steps were taken to improve the situation. The current implementation of the new campus academic information system has provided the opportunity to fully address the concerns.

The essay, *Academic Advising at UC Santa Cruz*, contained in Exhibit N, provides an analysis of the campus academic advising system and outlines the agenda for improvement in several areas: improved campus coordination; increased training and development for staff advisors; and improved technical support for advising. We discuss each in turn.

1. **Improved Coordination**

Since 1994 clarification of roles and coordination has been improved. The college academic preceptors have worked in their regular council meetings to ensure that there is uniform practice in policy enforcement across all the colleges and systematic interaction with staff from other advising units. The departmental advisors have developed their own advisory group to play a similar role. The Admissions Office has coordinated the development of a summer orientation program, along with fall and winter orientations.

In 1999 the VPDUE conducted a search for a campus advising coordinator. The coordinator, who came from outside the UC system, began an inventory of the campus advising staff and
background research on advising models. She also convened a cross campus advising forum, which was well attended by advising staff. However the coordinator position became vacant in 2001. During 2002-4, the VPDUE agreed to appoint a team of college academic preceptors to undertake three projects as part of their assigned duties:

- Development of a campus-wide annual advising forum and regular informal opportunities for individual staff development.
- Improved coordination between college-based lower division advising and departmental faculty and staff advising mediated by the “advising cluster” model (see below).
- Formal liaison with the Academic Information System implementation team (see below).

In June 2004, budget reductions eliminated funding for this team of coordinating academic preceptors. The current VPDUE has appointed two of those preceptors to on-going positions to facilitate advising coordination and technical support.

2. Increase training and development for staff advisors

For the last two years, the VPDUE has sponsored an all-campus advisors forum, at which staff from all advising units came together for development workshops and sessions in which issues were developed for the campus agenda for advising coordination. In addition, a regular series of “bag lunch” development meetings began in 2003-04 and were well attended. These activities will continue in the coming year, supported directly from the VPDUE’s office.

The Council of Provosts has increased support for college advisors who wish to attend either the annual UC Advisors conference or a regional meeting of National Academic Advising Association (NACADA). Support for departmental advisors to attend these conferences has varied from program to program.

Advising and support services provided for specific populations of students, such as students in the Educational Opportunity Program and transfer and re-entry students play an important role in supporting the success of our undergraduates. Good practice in academic advising is to insure that special purpose advising services like these are well integrated with general academic advisors and staff and faculty advisors in specific academic programs. In addition, the advising system should effectively integrate services provided through the Career Center. All of these aspects of advising can benefit from general coordination, despite their relative independence of supervision within different academic and student affairs divisions. Policy development and assessment managed from the VPDUE’s office can insure that resources devoted to advising are efficiently used to achieve their intended outcomes for students’ academic planning and success.

3. Improved technical support for advising

UC Santa Cruz has just upgraded its academic information system (AIS) to provide web portal access to student records. As we revise old paper-based undergraduate academic business processes to take advantage of the new system, we use four guiding principles.

- Students (and advisors) should be able to do the majority of their required work via web-based self-service functions.
- Information about requirements, curriculum, policies, and opportunities for enrichment should be provided through well organized portal web sites.
- The advising system should encourage students to connect with their (prospective) major program advisors, particularly the faculty, early in their careers at UC Santa Cruz.
- Advising appointments should be able to concentrate on proactive developmental planning, rather than reactive problem solving.

We anticipate that the new system will improve the technical support for academic advising by:

- Providing students and advisors with self-service automated degree progress checks of degree requirements.
• Allowing faculty and staff advisors to communicate more efficiently with their prospective and admitted students.

• Improving our ability to monitor student progress and provide proactive interventions.

• Supporting advisors with a portal-based workbench of tools for training, reference, and reporting.

• Improving articulation of transfer course work to UC Santa Cruz requirements.

An overview of initiatives currently underway is included in Exhibit N.

We expect our efforts in this area to result in improvements in our ability to track student progress effectively to allow timely proactive advising interventions. We will also be able to improve analysis of the various “student streams” to assist curriculum planning and scheduling that insures that we offer the appropriate courses (with the right capacity) to enable students to achieve their degrees in a timely manner.

4. Assessing the Effectiveness of Academic Advising

It seems reasonable to assume that the overall effectiveness of our efforts to improve advising should be reflected by further positive increases in the rates of retention and graduation as well as time to degree. Our previous student information system made it difficult to do analysis of these outcomes for particular groups of students. Given the need for us to focus in the near term on reconstructing academic advising within the new AIS, we defer development of a more finely tuned assessment system for a year or two. However we are committed to defining measures of effectiveness to guide the further development of academic advising for undergraduates.

We do not perceive the goal of further development of graduate education at UC Santa Cruz to be at odds with our commitment to sustaining and enhancing undergraduate education. An outcome of this review has revealed specific ways in which graduate students in programs related to our undergraduate programs can enhance undergraduate engagement with the research and creative activities of the campus. Expansion of graduate education can provide undergraduates in programs that currently do not have graduate components with senior colleagues who can assist the faculty in sustaining their commitment to excellent undergraduate education in a research environment.

More generally, it is clear that graduate programs contribute to the reputation of the campus in ways that attract undergraduate students who can most benefit from the type of challenging undergraduate programs that UC Santa Cruz offers.

CLOSING THOUGHTS

Our preparation for this review supports the judgment that UC Santa Cruz’s undergraduate program provides its students with an experience that meets or exceeds UC and national benchmarks for student engagement, particularly in the level of academic challenge, opportunities for enriching educational experiences, and the accessibility of its faculty. We do not find here any reason to consider substantial alteration of current practice.