WASC ACCREDITATION PROGESS REPORT

UNIVERSITY OF CALIFORNIA, DAVIS

FEBRUARY 28, 2008

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I. Institutional Context

Located 14 miles from the state capitol, the University of California, Davis (UC Davis) is home to four undergraduate colleges (Agricultural and Environmental Sciences, Biological Sciences, Engineering, and Letters and Science) along with many graduate programs and professional schools including Business, Education, Law, Medicine, Veterinary Medicine, and soon, a new School of Nursing. A leader in interdisciplinary study, UC Davis offers 104 undergraduate majors. In part because of our campus' proximity to the state capitol, and in part because of our agricultural heritage, we believe that UC Davis is a ready resource for policy makers and state agencies and the logical home for several state and federal research facilities. As a result, UC Davis has achieved a rare degree of synergy among teaching, research and service—a synergy that permeates undergraduate instruction.

UC Davis is one of 62 North American universities admitted into the prestigious Association of American Universities and is ranked eleventh among public universities nationwide (*US News and World Report*). UC Davis has a long and continuing reputation as a "student friendly" campus with many educational and experiential opportunities for students who choose to be involved. For example, each year over 5,000 students participate in internships, many of which qualify as public service, and our Student Programs and Activities Center sponsors over 470 organized student groups each year, developing a sense of community and providing uncounted hours of public service.

Leadership Changes

The campus has been fortunate to have the continued leadership of Chancellor Larry N. Vanderhoef, a strong supporter of undergraduate education, who takes great pride in our students' achievements in the classroom, in the community, and abroad. Our Interim Provost and Executive Vice Chancellor, Barbara Horwitz, is also known for her support of undergraduate research, as an administrator, and as a scientist. Enthusiasm for undergraduate education extends to the deans of the undergraduate colleges, each of whom has an associate dean for student matters drawn from the ranks of the Davis Division of the Academic Senate.

While UC Davis has experienced the predictable level of turnover in senior administrative positions, we will focus only on those offices particularly relevant to the undergraduate experience. The close collaboration between the offices of the Vice Provost—Undergraduate Studies and Vice Chancellor—Student Affairs noted in our WASC 2002-2003 team report was recently strengthened with the appointment of Fred E. Wood, former Associate Dean—Undergraduate Education in the College of Letters and Science and former Interim Vice Provost—Undergraduate Studies, to the position of Vice

Chancellor—Student Affairs. Additionally, the campus recruited for the new position of Associate Vice Provost—Undergraduate Studies, to assist Vice Provost Turner, oversee Summer Sessions, and to lead new initiatives in selected areas. Gary Ford, former Associate Dean of Undergraduate Study in the College of Engineering, has assumed this new important position. Formerly overseen by a staff employee who reported to the Vice Chancellor—Outreach, Summer Sessions is now directed by a ladder faculty member who reports to the Office of the Vice Provost—Undergraduate Studies.

Enrollment

Over the five-year interval from Fall 2001 to Fall 2006, the number of enrolled undergraduates rose from 21,294 to 23,458. Undergraduate students comprise 77 percent of the total 30,475 student headcount as of fall, 2006.

In 2005-2006, the campus conferred 5,901 bachelor degrees as compared to 4,610 in 2000-2001. Since the last WASC review, the campus has implemented all of the recommendations made in a campus study of new techniques for attracting high-achieving students to campus.

Financial Resources

As a part of the University of California system, the Davis campus shares the budgetary concerns of the University as whole. For many years, there were essentially no merit or cost of living increases for staff employees, and the influx of students was not accompanied by a commensurate income of state funds. This lag has helped drive in-state registration fees from $4,072 in 2000-2001 to $8,925 today, and out-of-state registration fees from $14,686 to $28,545. Although the campus is spending approximately 50% more on student services and financial aid today ($154 million) than five years ago ($107 million), student support is hard pressed to keep pace, and the cost of the University of California raises concerns about accessibility and diversification of the student body. There has been some relief in recent years as the University has established a compact with the Governor, as more research and private dollars flowed in, and as the national economic outlook has improved. One of the manifestations of increased state support is that the state now funds Summer Sessions, which was formerly an entrepreneurial activity. This means that undergraduate instructional needs and continuity with year-round instruction plays a greater role in summer offerings, and enrollments have risen dramatically since summer 2001.

Despite a generally unfavorable budgetary climate, undergraduate education is a central expenditure and has increased substantially from 2000-2001 to 2005-2006. Over that five-year interval the total campus budget rose from $1,116 million to $1,423 million. Instructional expenditures (undergraduate and graduate) increased commensurately, from $346 million to $474 million, or about 22 percent. At present, UC Davis is initiating a comprehensive campaign and increasing private support for undergraduate studies is a component of this. In other words, although modest, the trend is in the direction of increased financial support for undergraduate programs.

The current (Winter 2008) financial forecast for California is not promising. In preparation for what is likely to be a budget shortfall, the appropriate campus leaders and committees are at work developing strategies to protect our students, as much as possible, from the negative consequences of reduced funding.

In summary, UC Davis maintains an unwavering commitment to undergraduate education, a commitment that is revealed in campus expenditures, student headcount, and degrees conferred. An administration that has always accorded high priority to undergraduate instruction has been further strengthened as a result of reorganization and personnel rotation. Our campus is proud of our continued achievements in undergraduate education, but recognizes as in the case of all serious endeavors this will forever be a "work in progress." We look forward to WASC's continued facilitation of these important efforts.

II. REPORT PREPARATION

The Vice Provost—Undergraduate studies (VPUS), Patricia Turner, at UC Davis, serves as the Accreditation Liaison Officer, and her office oversees all matters relevant to accreditation. Although the Chancellor charges the relevant campus leaders and committees with following up on the WASC recommendations as appropriate to their mission in 2003, work in earnest on this report commenced during the spring of 2007. The VPUS put report preparation on the agendas of the Provost/Academic Senate Chairs Committee where it was determined that primary responsibility for the report would rest with the Senate Undergraduate Council and these three committees: Special Academic Programs, General Education, and Undergraduate Instruction and Program Review. The Davis Division Senate's new committee on technology was added to the list in order to facilitate the preparation of the section on educational technology. Academic Senate Undergraduate Council Chair Thomas Famula (Animal Science) and Davis Division of the Academic Senate Chair Linda Bisson met and corresponded with Vice Provost Turner and her staff during the summer of 2007 to establish work plans and a timeline for completions of drafts, circulation of documents, and final revisions. Updates on the progress of this report were offered at the Fall 2007 Council of Vice Chancellors and Provost/Academic Senate Chairs Committee meetings.

III. RESPONSE TO ISSUES IDENTIFIED BY THE COMMISSION AND VISITING TEAM

Campus Planning and Improved Coordination

The first recommendation of the WASC Educational Effectiveness Report asks UC Davis to:

Connect the Pieces. UC Davis needs to better coordinate, synthesize, and integrate its separate educational initiatives under the strategic plan. We see added value to UC Davis by pulling these threads together to create a more cohesive internal action agenda and external public image.

Elaborating on this recommendation, the Commission letter of June 27, 2003 notes that, "Many of the planning documents reviewed by the team were new and still in draft stage and the University will need to review the new core planning documents, such as the university-wide Educational Objectives and the "20/20" Strategic Vision Statement to ensure that they include important areas such as undergraduate research, information literacy, and general education.

As suggested by the evaluation team, designating priority and providing resources for these areas could have a significant impact on the improvement of the educational experience of students."

Three months after this letter was written, the "20/20" vision statement, codified as The UC Davis Vision, was adopted and is commonly referred to as the campus Strategic Plan. In order to ensure the plan's primacy in resource allocation decisions and planning, senior campus leaders were assigned as implementation coordinators over one or two specific strategies of the fourteen strategies presented in the plan. Their job is to monitor and encourage the employment of the particular strategies assigned to them. The plan proposes indicators of achievement for each strategy intended as performance measures that will help us answer the question, "How well are we doing?" These indicators of achievement are tracked regularly so that the campus can assess progress toward its goals. Since the plan's adoption in the fall of 2003, we have maintained a fairly detailed website containing annual reports which documents the considerable progress we have made in the implementation of the plan (http://strategicplan.ucdavis.edu/).

One example of the effectiveness of our planning process can be demonstrated by an overview of the steps that have been taken related to improving the writing skills of UC Davis students.   Communication skill enhancement is the first component of our Educational Objectives. In its Fall 2007 issue, *U.S. News and World Report* placed UC Davis in its top 15 institutions for Writing Across the Curriculum.   This is the first time any UC campus has been included in this list.   A case can be made that this success is linked to our implementation of the strategic plan. The overarching learning goal in the plan is to:

Provide enriching learning experiences that develop the intellectual and leadership capacity of students and advance the campus' educational objectives. With this goal in mind, the Executive Vice Chancellor, the Dean of Humanities, Arts & Cultural Studies (HArCS), and the Vice Provost—Undergraduate Studies all made significant financial investments in improving writing instruction. The relevant Davis Division Academic Senate committees invested hundreds of hours in developing and seeking approval for a campus-wide writing curriculum. These endeavors are identified in the annual reports.

In the 2003-2004 report we find that:

- A proposal for a University Writing Program (UWP) http://www.physics.ucdavis.edu/kiskis/ug_council/uwp.html was revised, disseminated, re-written and stewarded through multiple campus constituencies.
- UWP approved by the Davis Division of the Academic Senate on June 4, 2004, and is scheduled for transmission to the Provost by end of Spring Quarter http://writingprogram.ucdavis.edu/.
- National search launched for UWP director.
- Administrative Unit Review (AUR) on Subject A due for completion by end of spring quarter (URL forthcoming).

In the 2004-2005 report we find that:

- University Writing Program (UWP) was launched this year with joint oversight from the Offices of the Vice Provost—Undergraduate Studies and the Dean of Humanities, Arts and Cultural Studies.
- UWP engages in new collaborations with GE Writing, Writing Workshops for Faculty, Teaching Resources Center (TRC) collaborations, and a Writing Minor.
- Began national search for UWP director and established Clark Kerr Presidential Chair (search first year was unsuccessful, establishment of Kerr chair contributed to success).

In the 2005-2006 report we find that:

- Under joint oversight from the Offices of the Vice Provost—Undergraduate Studies and the Dean of Humanities, Arts and Cultural Studies Dean's Office, a successful national search was conducted resulting in the appointment of Dr. Christopher Thaiss as Director of the University Writing Program (UWP) holding the Clark Kerr Presidential Chair.
- UWP's collaborations with TRC to conduct full-day Writing Workshops for faculty continue to be successful, now finishing its second year; students now receive academic credit for Writing Internships in UWP via course 197 (Tutoring in Writing); UWP Curriculum and Program committees approved a Writing Minor and sent it forward for Academic Senate approval.

The 2006-2007 report focuses on future steps, indicating that in the 07-08 academic year the campus will:

- Continue with the Academic Senate approval process for a new UWP Minor in Writing.
- Focus on securing external funds to support UWP enhancements and hiring of additional ladder faculty.

For a much fuller view of the status of the University Writing Program, see
http://writing.ucdavis.edu/. This is just one example of the way in which we have put our
planning documents to work for the campus community.

   The campus has already initiated serious conversations about the next iteration of a
Strategic Plan. In the summer of 2007, Jan Gong, Senior Associate Vice Chancellor—
Student Affairs, was asked to review the preceding Strategic Plan and achievements and
progress; identify critical UC Davis and UC-wide aspirations; and develop a new
strategic plan for the future. Working with relevant on-and-off campus stakeholders,
Associate Vice Chancellor Gong will be charged with stewarding this project through
July 2009. Thus we feel quite confident in our claim that attention to strategic planning
is well-entrenched in the UC Davis culture.

Student Learning and Assessment

        In reference to the second recommendation, student learning and assessment, the
commission letter begins by acknowledging:

> The University has a strong foundation for assessing and improving student
> learning: committed faculty, strong institutional research capabilities, an evolving
> planning process, and appropriate structures for faculty dialogue within a highly
> collegial academic environment."

This commentary concludes by referring back to the team letter, noting:

> Many team suggestions bolster UC Davis approaches to assessing and improving
> student learning: (1) Incorporate assessment of student learning systematically
> with all program reviews (now in planning stages); (2) use campus-wide student
> survey data more effectively in program review; (3) employ trend and benchmark
> data more effectively across the campus; and (4) coordinate better analytical
> talent and information. (Numbers above added.)

We will address each one of these items in turn.

(1) *Incorporate assessment of student learning systematically with all program reviews
(now in planning stages).* As the team noted, the campus' program review processes
were under scrutiny at the time of the visit. Examination of the processes continued
under the auspices of a joint Academic Senate – Administration Program Review Task
Force, which proposed a revised program review process. The revised process was
approved by the Academic Senate Committee on Undergraduate Instruction and Program
Review (UIPR) in the 2006-2007 academic year, with departments and programs due for
review subject to the new guidelines as of January 2007. The UIPR website
http://academicsenate.ucdavis.edu/committees/undergrad_instruction.cfm details all
aspects of the new process. The first step in the process, as it always has been, is a self-
review of the program by its home department.

Sections 8 and 9 of the "new" program review self-study section specifically address assessment of student learning:

> 8. Educational Objectives Questions: What are the educational objectives of the major and how do they relate to those of the campus? How effective is the program in meeting its objectives?
>
> 9. Assessment Question: How does the program monitor and evaluate itself, and how are problems, once identified, rectified?
>
> It is important to note that in answering the questions in section 8, those preparing the self-review are asked not simply to give their own opinions, but also to refer to data summarizing responses to relevant questions from surveys of current students, alumni, and faculty in the program (see additional comments below). Moreover, the data are provided for all programs reviewed within a college in a given year (i.e., with a cluster, see below), allowing those preparing the self-review, as well as members of all committees and individuals who read and comment on the self-review as it moves through the process, to compare the data for each program to others in similar disciplinary areas.

Finally, in order to assist those departments in need of guidance on assessment, Jon Wagner, the Director of the Teaching Resources Center (TRC) was asked to serve ex-officio on the UIPR committee. A professor of education, in the School of Education, with a research background in assessment, Professor Wagner is able to steer departments to relevant resources. The UIPR committee has not yet examined the reviews submitted under the new guidelines; they are due to the Committee in the Spring of 2008. Departments that initiated their reviews under the "old" guidelines were grandfathered in and the work of the UIPR committee during Winter, Spring and Fall of 2007 focused largely on finishing the last of these reviews. We expect that by the time of our next WASC re-affirmation, we will be able to offer data-driven conclusions regarding the caliber of student learning within UC Davis majors.

(2) *Use campus-wide student survey data more effectively in program review.* Prior to proposing the modified program review process, the Program Review Task Force and the Office of Vice Provost—Undergraduate Studies (VPUS) worked extensively with the institutional researchers based in the campus Offices of Resource Management and Planning (ORMP) and Student Affairs Research and Information (SARI) to identify what data they already collected and could collect that would be useful to faculty evaluating their majors. As mentioned above, with the new system, departments receive a package of materials relevant to their majors and others being reviewed at the same time, which include data to be used in the self-study. Six of the eleven questions that undergird the self-study require the departments to comment on and analyze reports submitted by SARI and/or ORMP. Included in this packet is data from alumni surveys that asks students to report their opinions on the success of the program in preparing them for their postgraduate educations and careers. We know for example that across the University, 70% of our graduates who pursue graduate or professional school are admitted into their first choice school, and 86% are admitted to at least their second choice school. With respect to how well UC Davis has prepared them for graduate study, 76% of our

graduates respond as "more than adequate to very well" and 96% respond as at least "adequate." Similarly, with regard to how UC Davis prepared them for their careers, 56% of our graduates respond as "more than adequate to very well" and 92% respond as at least "adequate." We direct the major departments to respond to this data as it applies to the major as part of its process to assess how it meets its own and the campus's educational objectives. Again, this is more fully described at the website http://academicsenate.ucdavis.edu/committees/undergrad_instruction.cfm.

(3) *Employ trend and benchmark data more effectively across the campus.* One of the major distinctions between the old and new program review processes stems from the cluster approach now employed by the UIPR. Having the programs reviewed in clusters puts the data from individual programs in a context that makes them much more meaningful and provides at least a comparative, if not a truly external, measure of how each program is doing. Under the old system, departments and reviewers had only the last review as a benchmark for a current one. As an example, the Music department and the UIPR Committee, dean, and provost would only use the Music department's previous seven-year-old report in conjunction with its current one.   Further, the same year in which Music was evaluated might also generate reports from Asian-American Studies, Computer Science and other disparate academic enterprises.   While the new model requires the various constituencies to engage the old report, each major is now reviewed and provided with data on similar disciplines. Thus, Music is in the same cohort as Art History, Art Studio, Design, Techno-Cultural Studies, and Theatre and Dance. Consequently, we have moved from the dilemma of an "apples to oranges" comparison to a more manageable one more closely resembling "oranges to grapefruit."

(4) *Coordinate better analytical talent and information.* In response to the commission and the team's comments about the decentralization of our analytical talent and information in 2003, the then Provost and Executive Vice Chancellor, Virginia Hinshaw, appointed two groups to coordinate our various institutional and research functions. In the Spring of 2007, Provost and Vice Chancellor Hinshaw accepted the recommendation of the Institutional Research Policy Committee (IRPC) that it be disbanded and its tasks added to the agendas of the Council of Vice Chancellors (COVC). The IRPC made the case that its issues required COVC engagement and that efficiencies could be garnered from this shift. The other committee formed in 2003, the Institutional Research Work Group, continues to function and function well. As is evident in #2 above the institutional researchers based in ORMP and SARI work together well and have satisfied the faculty requests for data relevant to the program review process.

In conclusion, UC Davis has also been paying close attention to and participating in local and national debates on student learning and assessment issues. It is a topic that appears with increased frequency on the agendas of University of California system-wide meetings of administrators and faculty. As a member of the National Association of State Universities and Land Grant Colleges (NASULGC), UC Davis as well as other UC campuses closely followed the discussions on the Voluntary System of Accountability (VSA). We expect these lively and informative conversations to continue, and we will likely align our own practices with those proven to be effective in our sister institutions.

Undergraduate Research

UC Davis has a long tradition of supporting undergraduate students' involvement in research. Over the years, the campus has developed an expertise in the administration of undergraduate research opportunities and has created a faculty culture of mentoring and advocacy for undergraduate research. Because of these strengths and a desire for improvement in this critically important endeavor, the campus chose undergraduate participation in research as one of two self-study topics on educational effectiveness for the reaffirmation of accreditation process.

Our self-study and the WASC visiting team endorsed both the individual and programmatic efforts of faculty to develop and support a culture of undergraduate research at UC Davis. As the WASC team noted in their report:

> "There is clear commitment to undergraduate research on the part of many faculty at UC Davis." …"Team members were positively impressed by the evident dedication of the individuals responsible for various undergraduate research initiatives. Further, they are highly collegial, and we saw much evidence of a fine esprit de corps."

At the same time, the self-study indicated that the campus could do more to assure that our incoming first-year and transfer students, as well as continuing students, are oriented to understanding the research university and the opportunity it presents for hands-on learning as they progress through their undergraduate education. This is particularly important because increased demand will spur the faculty to increase its offerings. Thus, with the momentum created through the re-accreditation process, and in response to the WASC visiting team recommendations, we are revitalizing our efforts to move on to the next level.

WASC visiting team's recommendations #3 and #4 state:

3) *Define Research Activities More Clearly*: UC Davis needs to more carefully define what is included under the general rubric of research, with attention to various disciplinary contexts.

4) *Map the Sequence of Research Activities*: Mapping the sequence of undergraduate research offerings will allow UC Davis to guide and track student pathways through the research landscape. Such records of student experience with research will provide visibility to the value-added aspect of attending a research institution, help the institution decide on the strategic importance of undergraduate research, highlight the impact of undergraduate research on faculty workload, and enable the kind of outcomes and effectiveness assessment on which the accreditation process is based.

The commission letter further states,

"The team urged the University to consider how research should be incorporated into the undergraduate experience of a premier research university and to articulate the research skills and abilities that the University expects of a UC Davis graduate."

From past history, we know our most successful institutional initiatives are those that originate from among our faculty, or those in which faculty have had a strong hand in formulating and promoting. Over the course of our self-study, the idea of establishing a Center for Undergraduate Research was the focus of discussion among various faculty and campus administrators. That this might be our next step in institutionalizing undergraduate research was strongly endorsed by the WASC visiting team as a vehicle for providing leadership, coordination, and visibility for what was otherwise perceived as "good but disparate educational programs" at UC Davis. Since the WASC visit, we conducted a comprehensive survey on best practices at other institutions. Then, over a two-year period, we conducted numerous follow-up roundtable discussions, constituent meetings (e.g., faculty, students, administrators and staff), and planning sessions, which led to a campus proposal to the Provost to establish a campus-wide Center for Undergraduate Research and Creative Activities. (see full proposal, appendix 1).

The collective and collaborative planning discussions for the proposed Center independently yielded several recommendations consistent with those of the WASC visiting team such as:

- Make undergraduate research highly visible to both internal and external constituents;
- Provide increased leadership, coordination and collaboration across existing and new undergraduate research initiatives;
- Establish for the student a very early understanding of the "meaning of research" and what it means to do research;
- Create a four-year progressive pathway that fills the gap between Freshman Seminar to conducting and disseminating research;
- Address student preparation for research; identify core research skills and provide skill development;
- Explore ways to encourage and support faculty to take on undergraduate researchers;
- Assist faculty by providing administrative support for student research-oriented activities;
- Build in mechanisms for accountability for the faculty/student interaction;
- Assess undergraduate research programs and other related activities.

All campus constituencies are eager to launch the proposed Center. And, rather than wait to do so until sufficient funds can be raised through the campus capital campaign, the proposal was submitted to the Provost for consideration of institutional funding to support phase one implementation. Although the Provost was very supportive of the proposal, at the time the campus was faced with considerable resource constraints (both financial and physical space) which precluded a decision to move the Center forward.

Instead, the proposal was to be rolled forward for funding consideration in the subsequent year's call for "operating budget proposals that invest in the campus core strengths."

There is a great deal of optimism about what the future Center could accomplish toward integrating undergraduate research with undergraduate education. We know, for example, that based upon two years of student and faculty evaluation data (2003-05) the preparation for, and participation in our annual undergraduate research conference aligns with most of the campus educational objectives at "agreement" of 92% or higher. By extension, we anticipate similar outcomes tied to expanded engagement in related undergraduate research activities by an ever increasing undergraduate population.

In the meantime, the campus continues to advance a culture of undergraduate research consistent with the WASC team recommendations identified above. For example, the campus just became a charter member to The Reinvention Center, the only national organization to focus on undergraduate education exclusively at research universities. For the last six years we have actively participated in the regional and national forums which have served as an exchange for best practices, and a think-tank to deliberate on critical challenges research universities face, such as effective assessment, faculty reward structures, faculty-student partnerships, and the science of learning. UC Davis hosted the Western Regional meeting of The Reinvention Center in Spring 2006, and had the opportunity to present its draft proposal for the Undergraduate Research Center. We received excellent comments from the group that assured us we had done our homework on putting the important pieces together, and also some excellent suggestions to guide us through the challenges that lay ahead. As we move forward with the future Undergraduate Research Center, we anticipate one of our first steps will be to identify a faculty advisory group to provide leadership and to set priorities for the numerous responsibilities that would be assigned to the Center; to identify and define the core learning outcomes related to undergraduate research; and to endorse assessment approaches for various initiatives to be carried out under the Center's auspices. We also plan to continue to utilize the Reinvention Center as a rich resource to assist us as we design and implement protocols to assess undergraduate research learning objectives appropriate to a large research university.

Since the WASC visit, steps have been taken to assure undergraduate research remains a campus priority. Our campus Strategic Plan includes three primary goals "Learning, Discovery and Engagement." "Learning" is articulated as "*provide enriching learning experiences that develop the intellectual and leadership capacity of students and advance the campus's educational objectives*." Three strategies identified to meet this goal include:

- *Beyond the Classroom*: Expand research, internship and international experience for undergraduates;
    - o Indicator of achievement - Expansion of the quality, quantity and breadth of research and creative activity;
- *Instructional Programs*: Ensure that the campus maintains and develops high-caliber courses, curricula and academic programs;

▪ *Faculty-Student Interaction*: Enhance the quality of faculty-student interactions.

Thus, we are now postured to not only set undergraduate research as a campus priority to support the goal of "Learning" via "Beyond the Classroom" but also serve as a vehicle for quality "Faculty-Student Interactions." We will continue strategic planning to integrate undergraduate research with "Instructional Programs" by continuing to support initiatives that extend the classroom experience to include an understanding of undergraduate research and skill development. Finally, we can underscore undergraduate research at the nexus of the two other goals identified by the Strategic Plan. The "Discovery" goal translates to undergraduates as they partner with faculty to lead in the pursuit of knowledge. "Engagement" is carried out via specific student/faculty research interests that address the needs of the immediate and broader communities in which their work is focused and/or situated.

As further reference to the integration of undergraduate research in the classroom, based on our most recent alumni survey (2004-05), we know that 90% of the students identified with research and creative projects in the classroom context compared to 40% who had identified with this experience in 2002. This demonstrates both the direction of the campus over the more recent years, as well as the students' ability to recognize these experiences as they exist in the classroom. Clearly the potential for utilizing the classroom for pre-research skill development and/or incorporating more "research-like" projects is being advanced. Additionally, Physics 7 cited in our self-study as an example of skill development in collaborative problem-solving, has served as a successful model for recently garnering National Science Foundation support to further explore the modification of lab and discussion sections of chemistry and math via this learning approach (i.e., "Improving the Learning Experience in Introductory STEM Courses in a Large Research University").

We conclude this section of our interim report with where we began four years ago, that is, an update on our Freshman Seminar Program as a launching point for student understanding of what the undergraduate experience means at a research university. In this context it also serves as a demonstration of what can be accomplished via faculty commitment supported by the administration. As background, the year prior to our WASC 2002-03 visit, the Chancellor's Annual Fall Conference had as its theme "Undergraduate Education" framed by the Boyer Commission Report, *Reinventing Undergraduate Education: A Blueprint for America's Research Universities*. At that conference, faculty clearly agreed with the best practices of employing freshmen seminars as an opportunity to enhance faculty-student interactions (courses are capped at 20 students), and to make more visible the benefits of attending a research university from the onset of students' undergraduate experience. The seminars were also recognized as a pedagogical tool for laying the groundwork for conducting research in later years by engaging students with faculty who have distinguished research profiles, and introducing students to modes of inquiry necessary for any future research project. The faculty therefore advocated for institutional support to increase the number of seminars offered so as to reach a greater percentage of the freshman class. As a result, since our WASC site visit, the number of freshman seminars offered has increased from

43 annually in 2002-03 accommodating 7% of the freshman class, to 233 courses in 2006-07, with the capacity to accommodate approximately 93% of the freshman class. With the inclusion of 435 freshmen participating in first-year seminars through the University Honors Program, the campus is essentially able to offer a freshman seminar to its entire freshman class.

Over the last few years, a number of freshman seminar sections have been instituted with the specific course topic "*Understanding the Research University*" as a joint collaboration between academic affairs and student affairs. A campus committee on Student Transition and Retention (STAR) is currently considering a recommendation to expand the number of sections of this particular seminar topic. Since previous studies have shown higher retention among students who are engaged in their campus, these particular seminars explicitly set the stage for understanding what it means to be an undergraduate at a premier research university while highlighting opportunities for value-added undergraduate research experiences.

Aside from the increasing overall popularity of these first-year curricular offerings among students and faculty alike, an evaluation study of the freshman seminar program in its entirety is currently underway. The objective is to ascertain the extent to which the seminars are meeting the campus educational objectives; document evidence of student growth and learning; and identify exemplary practices that could be useful to current and prospective instructors. We also hope to identify the extent to which students in these seminars have gone on to participate in undergraduate research activities.

Educational Technology

The UC Davis WASC Steering Committee selected educational technology as its second special theme for its 2002-03 reaffirmation of accreditation. The external review team included two highly-regarded specialists in this arena who thoroughly scrutinized the materials provided and devoted significant attention to this topic during the campus visits. The Educational Technology section of the report submitted to the Commission offers a very useful and well-documented national overview of issues related to educational technology at that time and lays out many next steps that UC Davis could pursue as it moves forward. Indeed six of the eleven recommendations in the Educational Effectiveness Report stem from consideration of the educational technology special theme. In our May 2003 response to the report we noted:

> The report finds the use of educational technology at Davis to be consistent with the WASC requirements and specifically validates several existing educational technology activities including programs in the Classroom Technology Support Unit, Mediaworks, and the MyUCDavis Team. It is valuable to have this independent review and to be reminded that these successful individual programs will be most effective if they are part of a broader explicit plan for educational technology. The campus has begun a more formal planning process, that will now be further motivated and guided by the team's recommendations. Some of the specific educational technology recommendations numbered 5-10 in the report

will be challenging to implement and will require wide campus discussion. For example, a recent editorial in the student newspaper emphasizes a thoughtful and restrained use of information technology in instruction. As well, at both the campus and system-wide levels, the topic of information literacy continues to evolve. Nevertheless, since the recommendations are relevant to our situation and generally consistent with our campus culture, we expect to make good progress.

The letter from the Commission concludes, "With regard to educational technology, the team report noted the increasing impact of technology on both the content and delivery of the curriculum, and commended UC Davis on the support it provides to faculty who wish to use technology in their courses. Similar to undergraduate research, the team recommended that the University develop more formal expectations for technology and information literacy, connect them to the University's learning outcomes expectations for students, and incorporate evidence of their achievement into the University's strategic planning and budgeting processes."

Shortly after receiving the commission recommendations from our 2001-2002 review, UC Davis participated with other University of California (UC) campuses in a University of California Undergraduate Experiences Survey (UCUES) survey of students in which current undergraduates were asked to asses their current skill level in several areas and contrast it with their skill level on entering the UC system. Interestingly, our undergraduates rated their overall skill levels highest in computer-related areas, with more than 90% considering their internet and desktop computing skills to be good or better, with 70% identifying their skills as very good or better. (Survey analysis is available at http://www.sariweb.ucdavis.edu/reportretriever/index.cfm , see report #351). It appears ongoing UC Davis faculty work in this area accelerated following our last WASC review, but we do not allow these encouraging reports to curtail our efforts to evaluate the effectiveness of our use of educational technology.

Before reviewing the campus' status on the suggestions offered in the team report and Commission letter, several pertinent contextual changes at UC Davis should be delineated. There have been at least two key personnel changes relevant to our approach to educational technology. In January of 2006, Professor Jon Wagner was appointed Director of the Teaching Resources Center. A full professor in the School of Education, Professor Wagner brought to the campus' Teaching Resources Center research interests in technology in teaching and learning and the social contexts of teaching, learning, and educational research. In August of 2006, Peter Siegel was appointed as Vice Provost—Information and Educational Technology (IET). Vice Provost Siegel's interests include the nexus between technology and learning, as is evidenced by his March 2007 presentation entitled "Emerging Learning and Collaborative Tools for Building Campus Community." Other relevant institutional changes include the recent modification of the committees that inform decision-making about directions and investments in technology. The Davis Division Academic Senate added a Committee on Information Technology to its roster of committees. Further, the campus modified its primary advisory committee on technology. At the time of the WASC visit, there were two campus-wide committees with similar charges. In order to streamline processes, the two groups were merged in

June 2004 into the Campus Council for Informational Technology (CCFIT). Issues most germane to the WASC recommendations are largely but not exclusively within the domain of the CCFIT work group on Educational Technology.

Given institutional changes in combination with rapid changes within the world of educational technology writ large, Chancellor Vanderhoef devoted his 2007 Fall conference to information technology. Vice Provost Siegel, Professor Wagner, and select members of the committees above, as well as other campus citizens, planned the conference entitled *Information Technology as a Vehicle for Innovation at UC Davis*. This conference makes for a convenient anchor for commentary regarding where UC Davis is moving in terms of the suggestions articulated in the educational effectiveness review. Indeed the deliberations and follow up agenda for the Fall Conference speak quite clearly to four of the six recommendations. In order of appearance within the Fall Conference Report, the relevant WASC recommendations are:

5) Information Literacy: We recommend that UC Davis formalize its technology use expectations for students and provide necessary student training opportunities and assessment mechanisms for information literacy.

7) Technology Effectiveness: As soon as resources permit, build systemic instructional design, faculty development, and assessment procedures to ensure educational effectiveness results from investments in technology.

8) Technology Strategy: Adopt a broad institutional strategy for the use of instructional technology including identifying and supporting successful instructional models; establish technology; and address policy issues to reduce barriers to faculty adoption. (Summary…full recommendation at http://wasc.ucdavis.edu/).

9) Review the systems, services, funding, and policies associated with the educational technology infrastructure to ensure that they are cohesive and appropriate to institutional-wide requirements. (Summary…full recommendation at http://wasc.ucdavis.edu/).

One of the key conference topics was The Role of Information Technology in Teaching and Learning. Of particular note within the conference recommendations are core competencies in IET for students and faculty. Analyze effectiveness of technology and how to define effectiveness, # 8 and #9, are implicit within the missions of the Office of the Vice Provost—Information and Educational Technology. Along with the new Senate Committee on IET, the CCFIT group, and the Teaching Resources Center under the leadership of Professor Wagner, the conference as a whole and the follow up are designed to inventory present practices and garner input on a manageable institutional strategy. Shortly after the conference, the Vice Provost—Information and Educational Technology established a Conference Action Plan Committee and charged them with developing a five-year vision document and a specific set of follow-up recommendations based on the fall conference reports. Refer to http://vpiet.ucdavis.edu/fallconference.cfm to view the full final reports from the conference break-out sessions and the charge to the

Action Plan Committee. We will be pleased to update WASC on the campus progress toward adopting the recommendations during the next visit.

There were two other suggestions proffered by the WASC visiting team.

> 6) Technology in the Major: We recommend that each academic major at UC Davis review the relevant technology and information management requirements and ensure that curriculum includes the necessary experiences to meet the identified skills and understandings.

Approximately two years before this year's Fall Conference on Information Technology, the Davis Division of the Academic Senate overhauled its program review practices and expectations. Although the Senate opted to not specify technology and information management requirements per se (neither in the major nor in GE), the revised guidelines require the departments to assess the overall caliber of their majors in terms of quality of preparation for the workforce and quality of preparation for graduate school. It seems very unlikely that a department with inadequate "information management requirements" would be able to document success in workforce and/or graduate school preparation.

> 10) Instructional Development: In view of their substantial and important role, temporary instructors and teaching assistants need to be included in the full range of instructional development services provided to faculty.

Perhaps our essay in 2002 was unclear on this point. We have always made the full range of our instructional development services provided to faculty available to instructors, lecturers and teaching assistants.

In summary, for UC Davis as well as for any other institution of higher learning, educational technology remains a moving target. In 2002, the review team praised our MyUCDavis course management portal, and we are now phasing it out in favor of SmartSite, the highly-improved portal being launched in 2007-08. The recommendations from the team made no mention of wikis or social networking pages, and the students in attendance at the Information Technology Conference encouraged faculty to explore their pedagogical usefulness. We are eager to invest in technologies that are proven effective for student learning, but we are legally and morally obligated to spend previously unimagined dollars in security efforts to keep our students' personal information and identities safe from criminal activity. As has always been the case, the UC Davis faculty are eagerly looking for tools that will facilitate student success.

General Education

The WASC visiting team report noted, and the Commission commended, the campus' progress toward improving its overall approach to general education (GE) since the last reaccreditation review. Improvements such as providing a GE philosophy statement in the *General Catalog*, articulating educational objectives, devising a more

cohesive GE structure, adding more GE courses, and inaugurating a standing faculty Academic Senate committee that is responsible for the GE program were some of the accomplishments that were recognized.

Coinciding with the close of our re-accreditation process, the Academic Senate had just established an Undergraduate Council to provide central oversight of the undergraduate curriculum by connecting and helping to advance the efforts of several committees, including the General Education Committee. While at that time we had not envisioned major changes to the core GE requirements, the recommendation of the WASC team added fuel to campus discussions about the adequacy and effectiveness of the current GE Program.

WASC visiting team recommendation #11 states:

General Education: We recommend that UC Davis continue its deliberations about general education…the campus faces a choice between adopting a curricular structure that ensures student attainment of the stated general education objectives, breadth, and skills; or there needs to be outcomes assessment evidence that students are achieving these things upon graduation. UC Davis needs either to strengthen educational requirements on the front end of the student experience, or to develop a system for accumulating and reflecting upon outcomes evidence on the back end.

The commission letter further states,

"While UC Davis has made substantial progress in addressing general education, it bears the responsibility of demonstrating that its graduates consistently achieve the learning outcomes appropriate for a general education program through the various approaches it has taken…"

In the wake of our reaffirmation for accreditation, and not inconsistent with the historical progression of the campus' GE Program, the General Education Committee began a critical analysis of the GE program, beginning with efforts to strengthen the quality of student writing. As a first step toward this objective, we implemented an annual dissemination of campus writing standards and teaching resources which are sent to all faculty teaching GE courses designated with a "Writing Experience" emphasis.

As a second step, we adopted a campus proposal to establish a University Writing Program (UWP) as an independent unit (see appendix 2), and hired Distinguished University Professor Christopher Thaiss as the Clark Kerr Presidential Chair and Director of the Writing Program. Through its writing across the curriculum program, the UWP supports GE Writing Experience courses by offering training in writing instruction to the faculty and graduate students teaching these courses. It further advises the GE Committee and the Courses Committee on criteria for writing experience courses and provides guidance to the faculty in the development of more sophisticated writing assignments. As the UWP continues to advance its mission, we anticipate it will take the

lead in evaluating the educational effectiveness of writing instruction and monitoring progress in the overall quality of student writing. Future assessment and evaluation of the program's curriculum will be based on established guidelines for learning outcomes in university writing programs.

As a third step, in Fall 2004, in response to the WASC and UWP recommendations, the GE Committee began working on a draft proposal and guiding principles for revising the GE program. This action was further prompted by campus perception that implementation of GE goals needs to be more flexible, and the need to consider various concerns regarding particular components of the current GE requirements that were being discussed in several campus venues.

After more than a year of deliberation, the GE Committee asked the Undergraduate Council to appoint a joint Academic Senate-Administrative Task Force. The Council charged the GE Task Force with developing a more detailed proposal for a revised GE program, facilitating campus-wide input and acceptance of the new program, and ensuring administrative commitment of the resources needed to implement the revised program.

The GE Task Force was appointed in Spring 2006 and met every other week for the next two quarters, first to agree to a set of principles and then to develop a plan that would meet the objectives of a general education requirement within the mission of UC Davis as a public university (see appendix 3). In its deliberations, along with a desire to place greater emphasis on writing, the task force considered the need to strengthen a greater understanding of the sociocultural complexities of today's world within both domestic and international contexts. Exploring the possibility of an international component also responded to the 2005 Chancellor's Fall Conference recommendation for "internationalizing the campus" as well as to a June 2006 report issued by the Academic Senate's own Committee on International Studies and Exchanges (CISE) which proposed that a "Global Citizenship" component be added to the existing GE program.

Consistent with our principles of shared governance, broad consultation across multiple campus constituencies was essential to develop a workable set of requirements that are compatible with the programs of students in all undergraduate colleges, including students in engineering majors with very heavy unit loads. Consultation included curriculum committees of the undergraduate colleges, college advising staff and associate deans, a representative of the University Writing Program, the Registrar, and other groups. The result was that by Spring 2007, a revised GE program had been developed into a detailed proposal. Notable changes included (1) the movement from a course-based to a unit-based structure, with an overall increase in the number of units that define the GE Program; (2) the incorporation of a Core Literacies Component that extends beyond the traditional Topical Breadth Component; (3) defining GE learning objectives for each of the Core Literacies; (4) the inclusion of Quantitative Literacy and Scientific Literacy as mandatory requirements; (5) the integration of social and cultural diversity as essential elements of courses in Civic and Cultural Literacy, which are subdivided into two categories, American Cultures, Governance and History, and World Cultures; 6) and

finally, the reorganization of the previous writing requirement as part of a Words and Images Literacy that is designed to facilitate more cohesive development of critical thinking skills through writing and other means of communication. Literacy with Words and Images encompasses composition courses, writing-intensive coursework both within and outside the student's major, oral skills coursework and visual literacy coursework (see pp. 7-9, appendix 3).

In addition to the constituency discussions that informed the revised GE proposal, the proposal was presented in its entirety to the campus community via a public link to the Academic Senate website, where individual comments were posted, and through a campus town hall meeting. The proposal was met with mixed reaction that largely applauded the effort and recognized the need for a revised GE program. The availability of resources to implement the program was chief among the concerns related to the proposal, particularly as it pertained to sufficient instructional support (e.g., "trained" faculty and teaching assistants for writing-intensive courses, sufficient seats in courses satisfying other core literacies) to meet the pedagogical guidelines identified in the proposal. Therefore, the GE Task Force charged a summer workgroup to conduct an analysis of the existing curriculum to identify courses that could meet the proposed GE objectives. To further inform the decision-making process, the Office of Resource Management and Planning used these data to make a preliminary projection of the fiscal impact of the proposed GE program. The results of this analysis were posted on the University website as part of a comprehensive presentation of the revised plan. The new website was announced to all teaching faculty and advising staff via email. In the months that lie ahead, the GE Task Force will continue to meet with various academic departments, deans' offices, and college and senate committees to respond to questions, and will further fine-tune the proposal, if necessary. We plan to submit the proposal to the Academic Senate Representative Assembly for a vote, projected for early Spring quarter 2008. Pending passage, the new GE program will be implemented in Fall 2010.

Given the extensive development and review processes, the GE Task Force is confident that it has developed a plan representing a broad consensus among the faculty of the University of California, Davis, about the critical thinking and communication skills we want all of our graduates to carry away from their UC education. We believe that we can be proud of Davis graduates who will go through this revised GE program, who will add breadth to the specialized depth of their studies, who will take seriously the challenge of communicating ideas well in writing and in speaking, who are equipped with critical skills for evaluating claims made through visual or quantitative means, who understand how science is done, who understand the fundamental dynamics of American civic culture, who appreciate the richness of diverse backgrounds and experiences in our society, and who have stepped outside of their own cultural assumptions to see how people in other societies see the world.

Other Issues Requiring a Response

Widespread articulation of learning goals and the incorporation of student learning assessment into the strategic plan. Articulation of the learning goals are now

incorporated into the campus Strategic Plan and are widespread throughout the campus via prominence in the campus *General Catalog* and website. They are also included in the orientation materials shared and discussed with new students and their parents during the summer, as well as in the orientation materials and discussion with new faculty. Most importantly, we anticipate its application to the recently-revised program review process to have a strong impact on our ability to more effectively assess student learning. The extent to which student learning assessment is further articulated in the Campus Strategic Plan will be subject to the evaluation of the revised program review process and after the appointment of a new Provost and Executive Vice Chancellor who will assume direct leadership for the implementation of the Campus Strategic Plan.

IV. OTHER CHANGES/DEVELOPMENTS

We have already incorporated the most significant changes and developments into the preceding sections above.

V. CONCLUDING STATEMENT

We appreciate the efforts of WASC and we find the recommendations valuable and take them seriously. Our top leadership is invested in this and many people and committees contributed to this progress report. We are pleased that we have made progress but recognize that our progress is uneven across areas, and that we still have a long way to go. We look forward to continued self-study and improvement and to the 2013 WASC review.