California State University, Fresno

WASC

Educational Effectiveness Review

Fall 2004
While the Preparatory Review emphasizes the university’s analysis of its conformity to the first Core Commitment—basically, of its institutional capacity to offer a quality education consistent with its mission—the Educational Effectiveness Review examines the university’s success at fulfilling the second Core Commitment:

The institution evidences clear and appropriate educational objectives and design at the institutional and program levels, and employs processes of review, including the collection and use of data, that assure the delivery of programs and learner accomplishments at a level of performance appropriate for the degree or certificate awarded.

In other words, this review strives to answer the question, “To what extent is the university effective in delivering a quality education consistent with its mission?”

As outlined in its Preparatory Review, California State University, Fresno’s WASC self-study focuses on three themes:

- **Opportunity**—“Access to Quality Programs for Diverse Populations”
- **Exploration**—“Discovery of Knowledge, Self, and Society through Expanding Horizons”
- **Interaction**—“Transformation through Integration of Knowledge and Experience”

Each of these themes was carefully defined and developed in the Preparatory Review, accessible by the links above. In approaching the Educational Effectiveness Review, the WASC Self-Study Steering Committee reexamined each thematic area and formulated a set of specific research questions for focused analysis.

The selection of focus questions was guided in large part by a practical goal: the committee felt it important that such an intensive in-depth examination as called for by the Effectiveness Self Study result in information that would be useful to the university in its formation of future pathways to success. Thus the review itself must become an effective mechanism for learning and advancement of the university’s mission, and not a mere indulgence in accumulation of data supporting foregone conclusions.

With this in mind, working groups composed of faculty and staff each were charged with drafting the response to a single research question, refining the questions as they proceeded. The questions, in their final form, and the themes that each most strongly represents, are:
OPPORTUNITY

Here, the WASC committee and the writing teams elected to examine the university’s proactive stance toward providing the opportunity for a quality education as well as the success rates for diverse first-year undergraduate students:

A. How does the university advance student learning and its own improvement in achieving student learning?

B: How effective are academic and student support programs in meeting the needs of first-year students and improving retention and graduation rates?

EXPLORATION

Building upon their emphasis in the Preparatory Review, technology integration and research/creative/scholarly activity became the featured targets of the investigation, relating each of these to the institution’s educational mission:

C. How effectively has the university integrated the use of technology to support teaching and learning?

D. How has the expansion of faculty research, scholarship, and creative activity affected the learning environment?

INTERACTION

In its third thematic area, it was decided to examine evidence regarding the impact and extent of the university’s engagement with the community:

E. How has the university’s community engagement affected students?

F. How productively is the university engaged with the community?

The subgroups added committee members as needed to ensure broad and appropriate representation across the university community. Extensive consultation with the university community was involved in the drafting of these essays, including requests for existing data and supportive material, compilation of new data, and faculty and student surveys. These sources have been detailed as appropriate throughout the essays. The resulting drafts were reviewed and critiqued by the Steering Committee and the drafts were further revised. While basic structural unity has been sought, essays composed by different committees vary in internal organization and voice.

Following the presentation of each of the responses to the research questions are conclusions and recommendations elicited by what was learned from the essays and their development. In many cases, this takes the form of a list, a rather
This essay includes the response to two research questions:

- **A.** How does the university advance student learning and its own improvement in achieving student learning?
- **B.** How effective are academic and student support programs in meeting the needs of first-year students and improving retention and graduation rates?

**A. HOW DOES THE UNIVERSITY ADVANCE STUDENT LEARNING AND ITS OWN IMPROVEMENT IN ACHIEVING STUDENT LEARNING?**

This response was originally prepared as separate answers to two distinct questions: “How effective are academic programs in preparing undergraduate and graduate students for post-degree educational and employment pursuits?” and “How effective is the university in assessing student learning and using the data to improve instruction and student learning?” As both the background information and data sources used to respond to the two questions overlapped, they were subsequently combined into one compound question.

**STUDENT OUTCOMES ASSESSMENT PLANS**

As described in our preparatory report, in 1998 the university began an initiative in which departments were allowed to substitute the development and
implementation of assessment plans for one round of program review. Strong institutional support was evident in the assigned time, training, and other resources provided for the nascent assessment efforts. Importantly, the Student Outcomes Assessment Plans (SOAPs) were formative in nature. Thus the policy on assessment data indicates that SOAP data are the property of the assessing unit and are not to be used for budgeting (except at the initiative of the assessing unit) or personnel decisions.

The guiding purpose in the implementation of student outcomes assessment at California State University, Fresno is improved student learning through curricula and instruction modified as necessary. To best fulfill this purpose, outcomes assessment of student learning takes place at the department and program level (including the General Education [GE] program, special programs such as the Honors program, and, notably, graduate programs), where data (i.e., quantitative and qualitative observations) and information (i.e., interpretation of the data) can be used most judiciously and effectively to bring about change in curricula and instruction.

The assessment process is just now coming into its own, with all programs having completed assessment planning through the point of external review of their assessment plans. The university pays close attention to the progress of assessment at both the undergraduate and the graduate level. Department chairs are requested to include in their annual reports a statement of the assessment activities that have been carried out in the past year and any changes made in response to assessment results. To clarify the frequently perfunctory nature of previous reports, the provost has made a special request for an assessment update as a component of this year’s annual reports. Departments have further been requested to provide complete sets of syllabi for courses offered fall 2004. Included in these should be the expected student learning outcomes for the course, as required by the university’s Policy on Course Syllabi and Grading. The university’s Graduate Curriculum Subcommittee has been diligent in reviewing new course syllabi for the required student learning outcomes and reviewing the course topics and assignments for alignment with the expected outcomes.

Course syllabi, along with data on implementation of assessment plans and the 2003-04 annual reports will be used to update the information in WASC Table 7.1, Inventory of Educational Effectiveness Indicators (Appendix A1), prior to the WASC Educational Effectiveness (EE) site visit. With respect to the prevalence of defined student learning outcomes, in the recent Survey of Student Educational Experiences (Appendix A2), undergraduate students reported that “the course syllabus makes clear what I am expected to learn” in most or all courses in General Education (77%) and in the major (83%).

**CAMPUS PROGRAM REVIEWS AND ACCREDITING AGENCIES**

Periodic program reviews, as mandated by the California State University (CSU), provide a measure of program efficacy, including student learning, that is more...
summative than the student outcomes assessment process. Upon completion of an initial five-year SOAP cycle, there is the expectation that all academic programs, both undergraduate and graduate, will update their SOAPS for the succeeding five to seven years, thus ensuring a continuous cycle of evaluation of program effectiveness. The recently revised “Program Review Policy and Procedures” formalizes this expectation. The review process includes the preparation of a self-study and a site visit led by an external reviewer. Because programs were allowed to substitute their initial assessment planning for the program review, thus far only eight or nine programs have submitted self-studies under the revised process. These reviews will be available in the document room for the EE site visit.

Of the 58 undergraduate degrees offered at California State University, Fresno, approximately 30 are subject to disciplinary accreditation. A complete listing of program accreditations and certifications can be viewed in the current General Catalog. Appendix A3 summarizes the status of the external accreditations. Disciplinary accreditation materials from at least the last two years will be available to the visiting team.

ASSESSMENT ACTIVITIES AND EVIDENCE OF STUDENT LEARNING AT THE PROGRAM LEVEL

Although a more comprehensive presentation of information on program quality will be available for the EE site visit, evidence of student learning, including assessment results and their impact, is presented below. These results were obtained from departmental annual reports, responses to a special plea to department chairs, and abstracts of presentations at an assessment conference held on campus in 1998.

Faculty in the Department of Early Childhood Education evaluated course syllabi both pre and post assessment, and identified changes as a result of the assessment. Assessment of written papers using scoring rubrics in the Communication Theory course led to course changes, and student performance on final exams was used to assess whether students were meeting Communication Department objectives for student learning. The results of an Educational Testing Service Field Exam in Business administered to all seniors identified needed changes in the background Economics courses. The Department of Physics utilizes laboratory reports written by the students to analyze the effectiveness of the lab components of their various courses. A departmental assessment committee reviews these reports, comparing them to previously established expectations, and revises accordingly the content and structure of the lab components.

After developing the initial goals for the department, the Department of Criminology began its assessment process by reviewing its internship and student requirements and adjusting relevant internship course syllabi to reflect this review and the goals of the department. Assessment of the various aspects of the program takes place through entry/exit surveys, faculty surveys, papers and research projects, and evaluation of the students’ application of their
individual academic knowledge during the internship field experience. The department continues to monitor and assess the internship experience and to modify the program on a yearly basis as deemed necessary.

Instructors of required upper-division courses within the department undertake analysis of final exam essays from an upper-division, required course within the Department of Sociology. The outcomes of this analysis are then used to modify courses, the better to achieve departmental objectives. One instructor reported, “Through their answers to the questions, I can see that the concept now has a life to it. In their conclusions they need to think critically about what they learned, it is here that their comprehension (or lack thereof) is observed. Also, when the students verbally share with their classmates and explain to them their findings, I know knowledge was achieved.” In this case assessment activities caused the department to include hands-on project activities.

The Department of Music’s 2002 survey of 162 undergraduate and graduate alumni who earned degrees from the department between 1960 and 1998 yielded a 23% response rate. Alumni were extremely supportive of the department’s goals and offered recommendations for improvement of the curricula. However, alumni voiced great concern about the lack of music technology training and experience necessary for employment and post-degree educational pursuits. This concern resulted in the development of a new course, Music 47, Introduction to Music Technology, offered for the first time in fall 2003.

The Department of Communicative Disorders and Deaf Studies meets yearly with a community advisory committee composed of speech pathologists, public school administrators, parents, and other community members to hear observations and comments on the effectiveness of their graduates in the field. Five years ago, the department’s community advisory committee noted that graduates in Speech Pathology were unable to successfully treat swallowing disorders. The department responded by designing and including a new course, CSD 220 Seminar in Dysphagia and Traumatic Brain Injury, in the curriculum that leads to the Certificate of Clinical Competence in Speech-Language Pathology.

The Department of Curriculum, Teaching and Educational Technology is using scoring rubrics to assess student learning. As one member of the faculty noted, “Scoring rubrics have resulted in more students producing a higher quality of work. Another important benefit of using scoring rubrics is that it becomes fairly easy for [the instructor] to analyze overall student performance and to determine what areas need more attention either by providing students with additional information or more opportunities to apply what they have learned.”

Since 2000, the Department of Marketing and E-Business has been conducting a Senior Confidence Assessment using an instrument developed from a collective resume of knowledge, skills, values, and applied experiences. The resume was created utilizing input from faculty, graduates, and employers. Data
gathered from the Senior Confidence Assessment prompted the department to require Marketing 103, Personal Communication Tools in Marketing, for all majors; to develop and add Marketing 153, E-Marketing, to the curriculum; and to enhance Internet use in Marketing 101, Marketing Information Systems. In addition, the Marketing course now requires a multimedia presentation. Results of the 2002-03 Senior Confidence Assessment indicate that students’ confidence levels have increased in the areas of concern addressed by these curricular changes.

The results of a business focus group conducted in 2001 by the Management Department (Craig School of Business) indicated that the Craig School graduates needed stronger team skills and more experience with current technologies. Consequently, the Management Department significantly modified the Administration and Organizational Behavior core course. A virtual team component was developed for the course and initially tested on two of seven sections. Additional sections have been converted to the new format each semester, and next fall the rollout will be complete, with all sections included in the virtual team component. The virtual team experience has enhanced team skills (e.g., communication, team process, decision making, and conflict resolution) and provided multiple opportunities for the students to improve their ability to use various technologies. The department has integrated continuous improvements in the course, making modifications each semester based upon ongoing formative evaluation data.

The California State University (CSU) Systemwide Evaluation of Teacher Preparation (document room) was initiated by the system’s deans of education. The purpose of the survey is to provide information to campuses regarding performance in relation to the goals of productivity, excellence, and equity in preparing teachers for K –12 schools, and to provide information to campuses for program improvement relating to these goals. Data were collected through random sampling of 1999-2002 CSU graduates who had taught in K – 12 schools for one full year upon completion of their credential work, with a 50-55% response rate. A sample of participating site supervisors was also surveyed, with a response rate of 45-50%. California State University, Fresno graduates fall between adequately prepared and well prepared, near the CSU system average. The Kremen School of Education and Human Development has used these data along with data from a variety of other sources, including student and employer evaluations, to influence changes in existing and developing programs. Changes have been made in the frequency of orientations, advising, and course assignments, and in general program design components. For example, based on the most frequent suggestion from the system evaluation, the Multiple Subjects program now includes a course entitled Differentiated Instruction and Classroom Management.

The California Commission on Teacher Credentialing Institutional Report of Teacher Preparation Programs in 2002-2003 (document room) lists high pass rates of between 94% and 100% for the various examinations used for Multiple Subject, Single Subject and Level I Education Specialist Credentials.
The Department of **Food Science and Nutrition** has two programs accredited by the Commission on Accreditation for Dietetics Education of the American Dietetic Association. One of the three accreditation standards is focused on the interrelationship of program management with program outcome measures. In reviewing outcomes data from Dietetic Registration Examination scores, an employer focus group, and graduate placements, the faculty identified several areas that needed attention. Communication skills, both written and oral, were identified as a limitation of the students. The faculty decided to develop a scoring rubric for use across the curriculum that would provide students with knowledge of faculty expectations regarding communication skills, and provide faculty with a consistent and objective means for evaluating student performance. The accreditation process also led the department to enhance its outcomes assessment plan with a procedure that clearly defines responsibility for follow-through on outcomes data. The accreditation process helped to determine that students were insufficiently involved in the assessment process and to explore possible avenues for increasing their involvement. Lastly, faculty members who participated in the accreditation process stated that as a result of their participation, they felt more knowledgeable about the entire curriculum and university policies and procedures related to curriculum.

**The Division of Graduate Studies** conducts annual exit surveys in tandem with application for graduation. Data collected for the Graduate Student Exit Survey for 2001–2002 indicate that of the 234 responses received, 77% of the respondents stated that they would be employed in their field of study upon completion of the degree; 48% reported that completion of the graduate degree would qualify them for a professional license, certificate, or credential; and 13% reported that they had applied to a doctoral program. Students were also asked to evaluate various aspects related to their educational experiences in the areas of Curriculum, Faculty, Graduate Studies Office Services, and Facilities—all factors that contribute to the effectiveness of academic programs. Using a scale from 1 (poor, did not meet expectations) to 5 (superior, consistently exceeded expectations), the data collected from respondents were identified for each college/school and then averaged for a total university score. Of all educational aspects surveyed, students rated career/job opportunity advising the lowest, at 2.94, and improvement of their knowledge and skills the highest, at 4.14. Moreover, students rated the overall quality of their academic graduate experience at 3.88, with 90% of responding students indicating that they would recommend California State University, Fresno to others for graduate education.

In the **National Science Foundation Survey of Baccalaureate Origins of Earned Doctorates**, California State University, Fresno tied for second in Physical Sciences and ranked ninth in total sciences, nationally, among master’s colleges and universities that were baccalaureate origins of 1991-95 science and engineering doctorate recipients in the disciplines of Physical Sciences, Mathematics, Computer Sciences, Biological Sciences, Agricultural Sciences, Psychology, Social Sciences, and Engineering.
General Education was assessed through analysis of student written work, review of course syllabi, and surveys of faculty and students. While assessment of GE was embedded in courses in each of the four upper-division GE areas (IB, Integrative Science — Physical Universe and Its Life Forms; IC, Integrative Arts and Humanities; ID, Social Political, and Economic Institutions and Behavior, Historical Background; MI, Multicultural/International), assessment was not intended to measure the effectiveness of just the course in which assessment took place. Analysis of GE assessment results is ongoing; the most recently available report can be found in Appendix A4. “Evaluation of Written Work,” which follows, has mostly been excerpted from that report, while key findings from other assessment activities are summarized in the subsequent discussion.

**Evaluation of Written Work from General Education Courses**

Course work of students currently in upper-division GE courses was analyzed as an assessment of writing skills gained in lower-division GE courses. This analysis was conducted in the 2002-03 academic year in the upper-division integrative science and arts/humanities courses, and reported in the fall 2003. Faculty members were involved in developing rubrics, in scoring writing samples, and in providing feedback. General Education Scoring Guides were developed in the areas of writing, critical thinking, upper-division integrative science, and upper-division arts and humanities.

The Office of Institutional Research, Planning, and Assessment collected sets of student papers from each course offered in GE Areas IB and IC, selected a random sample, photocopied them, and returned the sets of papers to the instructors. Student papers were coded so students could be identified by Institutional Research (to be able to distinguish between native and transfer students, for example) but not by scorers; papers were scored anonymously. Copies of the respective writing assignments were also collected. In May 2003, 20 members of the faculty participated in the scoring of 167 writing samples.

The scoring results are summarized below. A score of 4 = accomplished, 3 = competent, 2 = developing, and 1 = beginning. In addition to providing a score on each dimension, scorers were asked to provide an overall score (not an average) that best represented the quality of the paper. The overall quality of student writing in the sciences (mean score, 1.75) was scored lower than the overall quality of writing in the arts and humanities (mean score, 2.50) or in writing overall (mean score, 2.21). Student abilities to think critically and to capture and express their thinking generated some of the highest scores (mean scores, 2.38 and 2.56).

<table>
<thead>
<tr>
<th>Writing</th>
<th>Knowledge of Conventions</th>
<th>Clarity &amp; Coherence</th>
<th>Rhetorical Choices</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB (Science)</td>
<td>2.39</td>
<td>2.42</td>
<td>2.10</td>
<td>2.21</td>
</tr>
<tr>
<td>IC (A&amp;H)</td>
<td>2.44</td>
<td>2.39</td>
<td>2.07</td>
<td>2.21</td>
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It is clear from the comments of faculty participating in the rubric evaluation process that the continued development of rubrics is important and that the alignment of the assignment to the rubric made a significant difference in the results. Misalignment may have been a factor in the lower than expected scores of student writing in the sciences compared to those in the arts and humanities. To the extent that the curriculum is aligned to outcomes and the assignments and rubrics are well designed, learning is documented, and embedded assessment can be used to measure educational effectiveness. One of the lessons is to encourage faculty to use rubrics and help them design effective writing assignments on which to apply them. A second lesson is that assessment processes that are embedded in class work bridge potential problems with student motivation because they represent real work both to the students completing the assignments and to the faculty members assigning them.

**Syllabus Review of General Education Upper-Division Integrative Courses**

Appointed in October of 2003, the GE Assessment Task Force conducted a review of a total of 101 fall 2003 course syllabi for all GE upper-division integrative courses. Reviews were done both in terms of the student learning outcomes outlined for the GE program and the requirements for campus syllabi set out in the [Academic Policy Manual](#). The fall 2003 course syllabi were also compared to the model syllabi originally approved by the General Education Committee. A number of recommendations came out of the task force review:

- Crisper statements of student learning outcomes should be developed to enhance future assessment activities in General Education Areas.
- GE course syllabi should have a stronger connection to their model syllabi submitted by the department and approved by the General Education Committee.
- Connections between expected student learning outcomes and specific course elements, which were included in the original course proposals, should be more explicitly mapped to course elements in GE course syllabi.
Campus policy currently urging GE faculty to include an iterative approach in which students receive instructive feedback and an opportunity to revise their work should be amended to require that iterative approach.

GE course syllabi should do a better job of detailing how they meet the 4000-word writing requirement, including a description of the assignment components, methodology, goals of the assignment, and criteria/standards against which they will be evaluated.

GE course syllabi should require sustained reading of primary source or non-textbook assignments to enhance student command of language, rhetoric, and argumentation.

Compliance with requirements for campus syllabi outlined in the Academic Policy Manual should be improved.

Errors of fact contained in some campus syllabi should be corrected.

**Student Survey of General Education, Areas IB and IC**

A student survey instrument was developed locally that gathers student feedback on the quality of their GE program educational experience students. Student survey results for GE Areas IB (Science) and IC (Arts and Humanities) have been tabulated and augmented by data elements pulled from the campus’s PeopleSoft student database; analyses will be available by fall 2004 for all four GE areas of study. From analyses of the student surveys of GE Areas IB and IC performed thus far, some general comments are:

As the student’s expected grade in the course went up, so did the average number of non-class hours they reported spending on the course.

Not surprisingly, students expecting Bs or As in their classes tended to respond that the number of class hours they devoted was adequate, and students expecting Cs or Ds did not.

More students reported they retained 13-15 units of coursework through the semester than any other level of unit load. More students reported they worked 17-32 hours per week through the semester than they did any other number of employment hours. These patterns were consistent for students who expected As, Bs, and Cs. Students expecting D grades were too few to summarize. This evidence supports the conclusion that unit load and weekly employment hours are independent of student grade expectations.

There were no differences in grade expectations by gender or by class standing.

Student age categories and native language categories show some spotty differences in grade expectations.

Student reports of assignments done in these upper-division General Education courses were consistent with faculty reports of frequency and character of the
Faculty Survey of General Education Areas IB, IC, ID, and MI

Faculty surveys were gathered at the same time the student instruments were distributed to GE courses. Responses came from 16 GE Area IB (Science) faculty members in spring 2002, 29 GE Area IC (Arts and Humanities) faculty in spring 2003, 20 GE Area ID (Social Sciences) faculty in spring 2004, and 41 GE Area MI (Multicultural/International) faculty in spring 2004, for a total of 106 faculty responses.

There is preliminary evidence of cultures differing by GE area that faculty bring to structuring their General Education courses. With respect to the use of Internet sources, Area IB and MI faculty assigned more than the typical expected, while Area IC faculty underutilized Internet sources. In papers of 10 pages or longer, Area IB and MI faculty assigned more than the typical expected, while Area IC faculty underutilized longer paper assignments. This is somewhat unexpected since Area IC courses are taught by faculty in the College of Arts and Humanities. In testing, instructors for courses in Areas IB and ID tend to give more in-class exams and quizzes, and those for courses in Areas IC and MI tend to give more take-home exams and quizzes. Area IB, IC and ID faculty assigned more essay questions on their exams and quizzes, while Area MI faculty assigned fewer essay questions on their exams and quizzes than expected. Area IC and ID faculty assigned fewer Web site developments and presentations/performances than expected, but Area MI faculty assigned more in both categories than expected.

Questions probing the use and character of a final examination showed that virtually all faculty members gave a final examination in GE courses. But faculty teaching Area IB courses gave more final exams that were comprehensive in nature (69%) than did faculty in Area IC (44%), Area ID (10%), and Area MI (46%). Most (39% to 63%; average 53%) class time was reported to be dedicated to lecture. Ironically, while faculty members showed differing patterns by GE Area in the frequency with which they assigned classroom tasks, they did not show any differing patterns in the goals they hoped to achieve in the semester using those tasks. Faculty reported large gaps between their perception of students and their opinion of where students should be in areas such as preparation for class, independent learning, intellectual curiosity, and competence in analytical skills, reading, and writing.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Departments in the university are using assessment activities to improve student learning across the campus. Assessment is widespread, but within specific programs, the extent of faculty involvement is not clear. Academic programs are in various stages of development and implementation of Student Outcomes Assessment
Plans. The various means constructed by academic programs to ascertain whether or not they are doing a good job of preparing students for post-degree pursuits testifies to the campus’s commitment to educating productive, contributing members of society. Assessment activities have been an integral part in the certification of programs by outside accreditation bodies. Many accrediting agencies require assessment activities, and health and education licensing boards require specific outcomes. Standards and expectations from these accrediting bodies have been used by academic programs and have resulted in improvements.

Information gathered during the first round of General Education assessment activities should provide a stimulus to faculty discussions about general education in particular and teaching and learning in general.

Examination of teaching and curriculum expectations and goals reveals a strong commitment to quality, and to ongoing improvement of the Fresno State student learning experience.

**Recommendations**

To encourage the continued development of a culture of evidence, the university needs to encourage communication about best practices for achieving and assessing student learning. This may include providing a venue for publication of program reports on the progress of implementation of assessment plans.

The General Education Committee should facilitate discussions about General Education and the meaning of the assessment results obtained to date with the intent of identifying ways of increasing student achievement of GE learning outcomes.

The university should provide sufficient resources and support to academic programs to assist in continuing and in expanding assessment activities.
B. HOW EFFECTIVE ARE ACADEMIC AND STUDENT SUPPORT PROGRAMS IN MEETING THE NEEDS OF FIRST-YEAR UNDERGRADUATE STUDENTS AND IMPROVING RETENTION AND GRADUATION RATES?

THE FRESNO STATE STUDENT - CHARACTERISTICS, ASPIRATIONS, AND NEEDS

The university is strongly committed not just to academic excellence and to teaching and learning, but also to diversity and educational equity. To understand the challenges faced by university retention programs, it important to note that a majority of students who attend Fresno State reside in the Central San Joaquin Valley. The eight counties in the Central Valley—Madera, Merced, Stanislaus, San Joaquin, Fresno, Tulare, Kings, and Kern—rate high on poverty and low on socioeconomic and educational indicators such as high school graduation, SAT test-taking rate, and college attendance. A recent report, Assessing the Region via Indicators: Education and Youth Preparedness, prepared by the Great Valley Center, a think tank in Modesto, California, highlights critical indicators that affect students in the Central Valley, including poverty, single-parent families, a low percentage of mothers with high school education, and lower student preparedness for college. These findings are detailed in Appendix B1, along with characteristics of California State University, Fresno students that include lower family income, a higher percentage of first-generation college students, and a higher need for remediation than exists at many comparable institutions.

As a result of the university’s strong commitment to educational equity, the success of university outreach programs, and cooperative educational programs with regional schools and colleges, the student body comprises many special populations. Among these are students with disabilities, reentry and adult
learners, low-income and migrant students, transfer students, first-generation college students, and students who represent the ethnically and culturally diverse population of the state and the region. Each of these populations enriches the academic experience and is the target of specialized programs and services designed to help them succeed and progress toward the degree. It is worth noting that current services mainly focus on first-time freshmen rather than transfer students, who are known to have difficulty with transition to and integration into the university environment. African American students and students whose major is undeclared are also at a higher risk for dropping out, and not specifically a current focus for special services. As described in the Preparatory Report, the Student Success Task Force recommendations (Appendix B2), will address support needs of a broader range of students.

**SPECIAL STUDENT SUPPORT PROGRAMS AND SERVICES**

California State University, Fresno offers a wide array of developmentally oriented programs and services to support the needs of special populations. These programs provide access, help students make the transition and integrate into the university environment and campus community, and support student learning and development. Innovative strategies and activities are employed to help students develop skills and abilities that will allow them to maximize their potential for success.

**Educational Opportunity Program (EOP)**

The Educational Opportunity Program (EOP) has been dedicated to providing access and retention support services to students from low-income backgrounds for 35 years. Many EOP students are first-generation college students; many of these come from a farm working background where English is not the primary language spoken at home. All are California state residents who depend on financial aid to finance their education.

In addition to regularly admissible students, the program provides special admission for students who do not meet standard CSU admissions requirements, but have demonstrated the potential to succeed with program support. Over the last decade, the program has provided university access to 6,491 students, 53% of whom required special admission. The program annually enrolls approximately 500 students and currently has a total student population of 1,800. EOP students represent about 10% of the undergraduate population at Fresno State. The majority (56%) of EOP students are Hispanic. Students of Asian/Southeast Asian, Cambodian, Vietnamese, or Laotian descent represent 24%, and African-Americans represent 9% of the EOP student population. Most EOP students reside in California's central valley. The majority of EOP students enter the university needing remediation, with low test scores on either the SAT or ACT and a high school grade point average between 2.00 to 3.00. Socioeconomic background coupled with personal circumstances and general under-preparedness for higher education, place the students at a higher risk for dropping out. These students are required to attend the Summer Bridge program
that prepares them to meet the demands of college instruction by bridging the academic and environmental gap between high school and the university. Essential elements of the program include formal college orientation; evaluation of basic skills; instruction in basic writing, mathematics, and study skills; and the development of cultural diversity awareness.

**Summer Bridge**

Over the last 17 years more than 3,600 students have benefited from the Summer Bridge program. The program leverages existing campus resources—faculty, staff, student support services programs, technology and web-enhanced courses—to create the instructional component and counseling services for student participants. Students are enrolled in three courses: University 1 (orientation to college), a writing course, and a math course. They also participate in lectures presented by experts on diversity issues, small discussion groups on topics such as managing time, dating/relationships, study habits, and decision-making strategies for achieving success in college.

**Faculty Mentoring Program (FMP)**

The Faculty Mentoring Program promotes the retention and graduation of Fresno State’s freshman and transfer students. Students are assigned to faculty mentors who work directly with students to provide support, encouragement, and advising. Students are provided with the tools needed to graduate from college and pursue graduate work. The FMP consists of three primary components: department and school/college faculty mentors; attendance at field trips and educational conferences; and follow-up and monitoring of academic and personal progress.

**College Assistance Migrant Program (CAMP)**

The College Assistance Migrant Program is a federally funded program designed to assist students from migrant or seasonal farm working families by providing personal, supportive, and retention services in the first and second year of enrollment. CAMP has been in existence at Fresno State since 1981, and is one of 41 model programs funded in the nation. CAMP serves a minimum of 80 students per academic year, with an 80% average retention rate after the first year and a 72% average retention rate after the second year enrolled at Fresno State.

**Intensive Learning Experience Program (ILE)**

The Intensive Learning Experience program serves freshmen scoring in the lower quartile of either the English Placement Test and/or the Entry Level Mathematics test. The ILE also provides funding to academic departments in support of small sections of English, entry-level mathematics, and reading. Outreach information encourages students to enroll in basic skills classes in English, mathematics, and reading during their first semester. Progress reports are regularly employed by
ILE staff to reach out to students in need and connect them with tutoring, workshops, advising, and other support services. ILE staff also provides academic advising and developmental counseling to ILE students during their freshman year. ILE students enrolled in lower enrollment sections of mathematics passed the course at a 75% level, compared to a 60% pass rate in larger sections. ILE students passed English A at slightly above the overall rate.

Student-Athlete Services (SAS)

The Student-Athlete Services program provides services to meet the special needs of over 550 student-athletes who participate in the 16 sports comprised by the Fresno State Division IA program. SAS offers assistance to student-athletes in successfully managing academic responsibilities and completing their baccalaureate degrees—while maintaining athletic eligibility—through a number of specialized services. These include new student admission and orientation, ongoing academic assistance, and life skills development.

In the spring of 1997, the football program began using a study skills tool called Academic Gameplan, which was developed by John Baxter, Assistant Football Coach. As the result, the football program has experienced significant success regarding improved GPA’s and academic retention rates. Several other teams within the Athletic Department have adopted parts of the plan, also with good results. Since 1999 the Gameplan has been published and is currently being used in over 900 junior high schools, high schools, and colleges across the country.

Student-athletes are similar to the general student population in that social and family background, poor schooling, lack of educational priorities, and personal problems play a part in retention and graduation rates. Despite this, data have shown a Fresno State 10-year graduation rate of 75% for freshman student-athletes who received athletic aid and exhausted their eligibility at the institution of origin, in comparison to the 82% rate for all Division I schools.

The Athletic Department tracks graduation rates according to NCAA standards. Accordingly, all freshmen on athletic aid who start their first full-time enrollment at California State University, Fresno and complete their eligibility on our campus are monitored over a six-year graduation period. The data indicate that those freshmen who started full-time on our campus in fall 1996 or spring 1997 had a graduation rate of 34%. Comparison data for all students on our campus who started at the same time and were enrolled full-time indicate a 43% graduation rate. Transfer student-athletes who started full-time enrollment in fall 1996 or spring 1997 on another campus, transferred to Fresno State with athletic aid, and completed their eligibility on this campus, had a graduation rate of 55%.
EFFECTIVENESS OF PROGRAMS AND SERVICES

A study has been completed by the Office of Institutional Research, Planning, and Assessment of the effectiveness of the first four programs described above: the Educational Opportunity Program (EOP), Summer Bridge, the Faculty Mentor Program (FMP), and the College Assistance Migrant Program (CAMP) using methodology described in Appendix B2. Interesting direct comparisons of student success for these students are their rates of progression of entering freshmen to the second year (Figure B1) and, at the other end of their academic career, their rate at which they have graduated by six years after entry (Figure B2). The figures include only rates for regularly admitted freshmen in order to provide comparison figures with the California State University System (CSU). Also included in the figures are the performances of all regularly admitted freshmen who were not participants in the four programs (Non-P).

![Figure B1: Persistence to the 2nd Year of Regularly Admitted Freshmen](image1)

![Figure B2: Six-Year Graduation Rates of Regularly Admitted Freshmen](image2)

Fresno graduation rates are an average over 1995-1997 cohorts; CSU is 1997 rate.

The decline in the retention rate over the three years studied, as seen in Figure B1 for the Fresno students, reflects the impact of a strict enforcement, beginning with the 1999 cohort, of a system requirement that students complete remediation in their first year or leave. That policy had been enforced on most other CSU campuses prior to 1999. Even with this decline, the first-year persistence rates, even for the programs for at-risk students, significantly exceeded that of the CSU as a whole. Figure B2 indicates that this early success translates throughout the undergraduate experience.

Direct comparisons of student performance – persistence, graduation, and academic success – are important but do not convey the whole story, since the
students in these programs are, by virtue of their backgrounds, at risk relative to the majority of their classmates. To provide greater insight into the effectiveness of these programs ("actual" rates), "expected" rates also were computed for the support programs (Figures B3-B6), based upon the performance of nonparticipating students of comparable backgrounds and academic indicators (high school GPA and SAT scores).

These figures give significant evidence that the support programs are making an important difference in the lives and academic success of their participants. While the Educational Opportunities Program does not appear as successful as the others in these figures, it should be noted that family income is a very important factor in selection into the program and that factor was not used to define comparable students when computing expected success.

The university has received national recognition for the number of undergraduate degree awarded to Hispanic students. In 1997, Hispanic Outlook magazine ranked Fresno State 11th nationally in the number of undergraduate degrees awarded to Hispanic students, and in 2000, ranked it 15th.

Of the 2,909 degrees awarded to Fresno State undergraduates in 2001-2002,
students of color earned 1,181, with the greater number (774) going to Mexican-American and other Latino students. EOP students received 297, or 10% of the degrees awarded, which is consistent with their representation in the Fresno State undergraduate population.

**Advising**

Student perception of the importance of and their satisfaction with academic advising at Fresno State was studied through an analysis of survey results from the Student Needs and Priorities Survey (SN PS indicated that students ranked faculty advising in major departments, publications such as the catalog and class schedule, and fellow students as the advising resources of highest quality. Pre-transfer advising from the community college and preadmission advising from high school were rated lowest in quality.

The SSI provides further insight into student perceptions about advising (Table B1). Students ranked the five items on the academic advising scale as equal in importance to safety and instructional effectiveness. This was parallel to national student perceptions for the SSI at all four-year public institutions. Satisfaction with the approachability of academic advisors at Fresno State was lower than for respondents nationally; nevertheless, Fresno State student respondents attached more importance and satisfaction to advisors' helping students with setting goals than their national peers.

**Table B1. Mean importance and satisfaction for SSI advising items (administrations in 2002 and 1998)**

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<tr>
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</thead>
<tbody>
<tr>
<td>My academic advisor is approachable</td>
<td>6.42</td>
<td>5.03</td>
<td>6.31</td>
<td>5.10</td>
</tr>
<tr>
<td>My academic advisor is concerned about my success as an individual</td>
<td>6.25</td>
<td>4.77</td>
<td>6.23</td>
<td>4.82</td>
</tr>
<tr>
<td>My academic advisor helps me set goals to work toward</td>
<td>6.13</td>
<td>4.63</td>
<td>6.10</td>
<td>4.62</td>
</tr>
<tr>
<td>My academic advisor is knowledgeable about requirements in my major</td>
<td>6.54</td>
<td>5.32</td>
<td>6.54</td>
<td>5.30</td>
</tr>
<tr>
<td>Major requirements are clear and reasonable</td>
<td>6.52</td>
<td>4.94</td>
<td>6.42</td>
<td>5.04</td>
</tr>
</tbody>
</table>

While Table B1 looks at the five SSI items dealing with advising, Table B2 places advising items in context with all 73 SSI items. Both in 1998 and 2002, respondents ranked "competent academic advisor" as fifth in importance among all items. Satisfaction declined from a rank order of 5 in 1998 to 11 in 2002. "Clear and reasonable major requirements" moved from eighth in importance in 1998 to tenth in 2002; satisfaction remained essentially the same.
Table B2. Importance and satisfaction ranks for top 10 SSI items as selected by Fresno State respondents.

<table>
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<tr>
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<tbody>
<tr>
<td>Few Registration Conflicts</td>
<td>1</td>
<td>54</td>
<td>3</td>
<td>35</td>
</tr>
<tr>
<td>Course Content in Major</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Excellence of Instruction (Field)</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Faculty Expertise in their Field</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Competent Academic Advisor</td>
<td>5</td>
<td>11</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Quality of Instruction (Overall)</td>
<td>6</td>
<td>17</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>Safe and Secure Campus</td>
<td>7</td>
<td>29</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Tuition Worthwhile Investment</td>
<td>8</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variety of Courses Provided</td>
<td>9</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear/Reasonable Major Requirements</td>
<td>10</td>
<td>21</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Fair &amp; Unbiased Faculty</td>
<td></td>
<td></td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>Faculty Available Outside Class</td>
<td></td>
<td></td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Explanatory Comments: Respondents ranked “few registration conflicts” 1st in importance and 54th in satisfaction among all 73 SSI items in 2002. In 1998 “course content in major” ranked 1st in importance and 9th in satisfaction.

Discussion

The university recognizes that academic advising is critical to student success and institutional productivity and has shown commitment to improving campus advising. Over the last three years, several groups of faculty and staff members have been appointed to review the state of campus advising and proposed recommendations for improving the availability of advising resources and interventions to enhance the quality of advising. The undergraduate Academic Advising Council, appointed by then Provost Michael Ortiz in 2001, concluded that academic advising across the campus was fragmented and needed decisive and immediate action to improve. The council was further concerned that there was no single place where prospective, current, and returning students could receive appropriate advising and/or direction as to where to receive appropriate academic advising. Limited in-service workshops for advisors and the lack of a reward for excellent academic advising performance in the Retention Tenure Promotion (RTP) and Faculty Merit Increase (FMI) processes were also noted.

Recommendations to counteract these problems resulted in increased staffing in the Office of Advising Services and Evaluation to strengthen advising services to current and prospective students. The number of in-service workshops was increased, and collaboration between academic and student affairs units on advising and other student issues became more evident. The Office of Advising Services was established as the point of contact for current students on advising-related issues and University Outreach Services was to handle
The Strategic Planning process resulted in two Plan of Excellence II goals related to student advising and orientation. The Office of Advising Services has primary responsibility for developing and implementing activities related to those goals.

Consistent with the Plan of Excellence Goals 5 and 6, the Office of Advising Services has developed and implemented several initiatives to strengthen and coordinate campus-wide advising and thereby improve the quality of academic advising. An Online Advising Referral Guide and the B.A.R.K for Advisors Online Handbook are now available to faculty and staff advisors to support the advising process. The Campus Advisors Network (CAN) was organized in spring 2003 to provide a forum for campus advisors to discuss current advising issues. Participation in the monthly Campus Advisors Network has grown to 64 campus advisors (49 staff advisors and 15 faculty advisors), a 68% increase over spring 2003. An Advisors Listserv (ADVO_INFO), which has approximately 150 subscribers, is used for advising updates and announcements.

In addition, regular updates and training are provided to faculty and professional advisors on complex advising issues and General Education advising. Advising Services has co-sponsored faculty workshops with the Center for Enhancement of Teaching and Learning on academic advising; disqualification and readmission; and obtaining degree audit reports through PeopleSoft.

In response to Strategic Planning Goal 6 "to establish a mandatory and centrally located orientation program that includes a variety of formats," the new student orientation program was refreshed and an online version is now available to students who are unable to attend the on-site program. Attendance at new student orientation has been substantially increased, from 32% of first-time freshmen for fall 2000 to 69% of the freshman class participating in the experience for fall 2003. Transfer student participation has also grown, from 27% in fall 2000 to 55% for fall 2003.

Conclusions and Recommendations

Conclusions

In spite of socioeconomic status, prior educational deficiencies, or financial or language barriers, students can and do succeed at Fresno State. In light of the special characteristics and challenges that our students bring to the university environment, the university has met its commitment to helping students succeed and contribute to the overall educational and socioeconomic goals of the state of California. Our analyses of student success rates and support programs suggest:

1. Fresno State students have a higher need for remediation in English and mathematics at entry; yet, the percentage of students who complete remediation requirements successfully within the first year exceeds the CSU system rate.
2. First-year retention rates for support program students are comparable with those of the university as a whole and well above those for the CSU system.
3. While there has been external and internal data collection and reviews of student support services programs, data collection has not been systematic or consistent for all programs.
4. Student success and the quality of the educational experience are dependent on a sufficient level of funding allocation for support programs.

**Recommendations**

All student support programs must initiate systematic assessment planning to substantiate program effectiveness and to ensure continuous funding.

It is crucial that the university maintain an adequate level of funding for support programs to continue and expand their effectiveness with special student groups.

The results presented here confirm the conclusion from the Preparatory Review concerning the importance of full implementation of the recommendations of the Student Success Task Force (Appendix B3).

Priority must be given to assessing the needs of transfer, African American, and students with undeclared majors groups, and to designing proactive strategies to support their success at Fresno State.

Student Advising Services must initiate more aggressive measures to strengthen and coordinate campus advising for the purpose of enhancing student success and productivity, as measured by persistence and graduation rates. Activities should include orientation of professional advisors and faculty members to student concerns, as well as technical training and dissemination to advisors of advising resources.

The Division of Student Affairs should implement internal department and program assessment plans to substantiate the impact of all support programs in improving student retention and graduation rates.

While the university community is continually engaged in assessment and reexamination of programs and activities that contribute to student access and success, existing programs such as those mentioned in this essay have provided a strong model for student success at Fresno State. These programs reduce barriers to enrollment, facilitate student transition to the university environment, build a sense of community, establish social networks, integrate students into the university, connect students with resources, and nurture student growth and development.
This essay includes the response to two research questions:

- **C.** How effectively has the university integrated the use of technology to support teaching and learning?
- **D.** How has the expansion of faculty research, scholarship, and creative activity affected the learning environment?

### C. How Effectively has the University Integrated the use of Technology to Support Teaching and Learning?

California State University, Fresno envisions a teaching and learning environment where students and faculty have anywhere, anytime, electronic access to information resources that are used effectively to deliver high quality education and service. Since April 2000, the university has been involved in a major strategic technology planning process to achieve this goal. See: [Instructional Technology Retreat](#), [WASC Preparatory Review](#), [Strategic Plan](#).

#### Strategic Plan

The technology strategic planning process was Phase 1 of a three-phase effort to integrate technology into Fresno State’s learning landscape. Phase 2, currently underway, is the implementation of the technology initiatives identified during the planning process. This phase includes upgrading of the network infrastructure, distribution of new laptop computers to all full-time equivalent faculty, enhancement of classroom technology, and build-out of the campus wireless network. An update of the status of the technology infrastructure, including facilities and support and training, can be found in Appendix C1.

Phase 3, which is dependent upon but overlaps Phase 2, is the effective use of technology to enhance the teaching and learning experience for our students and faculty.

It is important to note that the initiatives in Phase 2 have been scheduled for implementation across several years. The ultimate effect of these initiatives on teaching and learning, therefore, will evolve over time as technology becomes more available to faculty and students.

#### Measurement of Effectiveness

Measurement of the effectiveness of the strategic technology initiatives for teaching and learning will also evolve over time. Currently, the university’s progress toward effectiveness is in its early stages as implementation of the strategic initiatives (Phase 2) continues. The network infrastructure project will begin construction in AY 2004-05, the wireless build-out is planned to occur through 2007, distribution of laptops to full-time equivalent faculty was accomplished in fall 2003, and additional technology-enhanced classrooms are being added each year. At this early stage of Phase 3, measures of...
effectiveness, therefore, are focused on integration of the technology in teaching and learning. This report focuses on the early indicators discernible at this time. Examples of innovative and advanced uses of technology by programs and faculty members appear in Appendix C2.

Prevalence of Technology

Since 1998, Fresno State has conducted a technology survey of faculty, staff, and students (alternate years) that includes access to hardware and software, applications used, competencies possessed, and future projected needs. Findings from the most recent faculty survey are available online. Appendix C3 provides further information regarding online users of university technology offerings. Faculty members surveyed in 2003 reported:

In classroom instruction, 55% of tenured faculty members used an LCD projector; 24%, electronically distributed video; 58%, wireless internet access; 52%, a classroom stationary computer; and 68%, a laptop computer. Results also revealed that 68% of faculty members required that students use the Henry Madden Library’s electronic resources; 95% used e-mail with students; and 83% asked that students use the Internet for assignments.

Faculty members reported using websites (their own or those in Blackboard) for syllabi (88%), class notes (78%), course handouts (76%), on-site homework assignments (78%), discussion boards (40%), and tests and quizzes (39%). Less widely adopted were video (20%), simulations (11%), on-site homework assignments (78%), discussion boards (40%), and tests and quizzes (39%). Less widely adopted were video (20%), simulations (11%), on-site homework assignments (78%), discussion boards (40%), and tests and quizzes (39%). Less widely adopted were video (20%), simulations (11%), on-site homework assignments (78%), discussion boards (40%), and tests and quizzes (39%). Less widely adopted were video (20%), simulations (11%), on-site homework assignments (78%), discussion boards (40%), and tests and quizzes (39%). Less widely adopted were video (20%), simulations (11%), on-site homework assignments (78%), discussion boards (40%), and tests and quizzes (39%). Less widely adopted were video (20%), simulations (11%), on-site homework assignments (78%), discussion boards (40%), and tests and quizzes (39%).

Of faculty members with Web sites, in the fall 2003 survey, 9.5% taught a class that met entirely online; 1.4%, entirely except for exams; 2.7%, greater than 50% online; and 86%, mainly face-to-face.

Those faculty members who have committed time and resources to integrating technology into courses for the benefit of students have been very satisfied with the results. The overall faculty response to the technology initiatives was positive, with 73% of the respondents considering the speed of the campus technology build-out to be about right or too slow.

Telephone surveys of students were carried out in 1998, 2000, and 2002, with response rates of 59% - 68% and 396 to 547 interviews completed. Among the results:

A large percentage of students in both 2000 and 2002 reported using computers for their classes outside the classroom. In 2002, about 66% reported that they had used computers for class work outside the classroom in 75% or more of their classes. Almost a third reported using the Internet in at least 75% of their classes and about a quarter reporting using email in 75% or more of their classes. Internet and email use increased from 2000 to 2002.

One-fifth of students in 2002 reported they had taken training workshops offered by the library; students taking these workshops reported high levels of satisfaction (64% very satisfied, and 35% somewhat satisfied).

Considerable interest was expressed in no-cost, two-hour workshops for computer training. Fifty percent or more reported interest in workshops for presentation software (74%), graphics software (71%), web page editors (67%), video editing software (64%), databases (62%), statistical software (58%), and operating
systems (50%). The percentage of students indicating an interest in these workshops has decreased from 2000 to 2002 for operating systems, word processing, spreadsheets, databases, e-mail, the Internet, and presentation software, but still remains at high for most areas.

About one quarter of students in 2002 were very supportive of a modest student fee for technology if it was necessary in order to provide students with computing resources to ensure the quality of their education. About 41% were somewhat supportive, while 8% were somewhat opposed and 8% were very opposed.

In 2002, almost all students (97%) reported using computer applications such as word processing, spreadsheets, databases, and presentation software and, of these students, 77% felt their skill in this area was excellent or good. About the same percentage of students reported using the Internet (96%), and 90% felt their skill in using the Internet was excellent or good. A smaller percentage reported using e-mail (57%), and 96% felt their skill in this area was excellent or good. Only 14% reported using statistical software, and 47% felt their skill in using statistical software was excellent or good.

In 2002, 96% of students had a computer at home (up from 74% in 1998 and 88% in 2000), and another 2% had access to a computer off campus. Only 2% did not own or have access to a computer (down from 11% in 1998 and 5% in 2000).

Online Learning

Fresno State began experimenting with online course delivery systems in 1997. In April 2000, the Information and Educational Technology Coordinating Committee (IETCC) identified six strategic technology goals, including courseware development (MacNevin, 2000). This led to the Task Force on Courseware Development, which recommended the creation of the e-Course Development and Administration Team (Task Force, 2000), now known as Digital Campus.

Digital Campus maintains the university’s Blackboard course management system, providing training, technical and media creation assistance, and course design support for faculty teaching with Blackboard. Through the Digital Campus Resource Center, faculty members have access to expertise and technology to enhance their online courses through the use of rich media such as streaming video. Furthermore, Digital Campus provides resources to assist students in accessing and using Blackboard courses (Digital Campus, 2003c).

The integration of online learning in the teaching and learning environment at Fresno State has increased at an accelerating pace. In fall 2003, 41% of faculty and 39% (1,189) of course sections used Blackboard, up from 27% of courses in spring 2003. Student enrollments in courses using Blackboard also continued to increase, rising from 21,563 in spring 2003 to 33,379 in fall 2003.

Student reaction to the Blackboard course management system has been positive.

Sixty percent of the Blackboard students surveyed in spring 2002, and 57% of the students in spring 2003, indicated that online lecture notes and presentations have a positive impact on their learning (Digital Campus 2002, 2003b).
Eighty-three percent of the Blackboard students surveyed in spring 2002, and 78% of the students in spring 2003, agreed or strongly agreed that the information posted by faculty was “up-to-date and relevant to the course” (Digital Campus, 2002, 2003b). Eighty-eight percent (2002) and 91% (2003) of the Blackboard students surveyed indicated they would take a Blackboard course again (Digital Campus, 2002; 2003b). These results were confirmed by the Student Technology Survey (2002), in which 87% of those students surveyed who used Blackboard would take a Blackboard course again.

Students’ online learning experiences are also being enhanced through the use of multimedia course materials including streaming video and audio. Digital Campus supports faculty use of multimedia materials in Blackboard courses, while the Center for Enhancement of Teaching and Learning and the AIC Technology Training unit collaborate in providing training in multimedia production.

As of Oct. 6, 2003, Blackboard courses incorporated 3,975 video files and 105 audio files (Tsai, 2003). The Digital Resource Center completed 215 projects for faculty and staff in academic year 2002/03. These projects included scanning, digitizing, and document uploads (Digital Campus, 2003a). Three dozen faculty and staff members have taken the project-based course in multimedia production.

Distance Learning

As the sole public four-year institution serving much of the central San Joaquin Valley, Fresno State has used technology-mediated instruction to increase student access since 1987. Most of our programs to date have been based at off-campus sites, partnering with community colleges or other four-year institutions to provide degree completions.

Our primary partnership with the College of the Sequoias (COS) in Visalia, 40 miles distant, was established in 1987. Upper-division degree completions in Liberal Studies and Criminology are available at the COS site for students transferring from COS to Fresno State. Spring 2003 enrollment at the Fresno State/COS Center was 492, with 125 students graduating in May 2003. A more recent partnership with the West Hills College District, implemented fall 1999, enrolled 112 students in fall 2003, primarily in Liberal Studies. The Criminology degree completion has also been made available at this site. While our memoranda of understanding with these two locations also call for the provision of the Business curriculum, we are still in the process of identifying a cost-effective way to implement this commitment.

The large number of students enrolled in courses at COS makes it possible to analyze student performance. The grade distributions for COS and campus students were consistent at the 0.05 level for 134 of 170 courses offered simultaneously to students at COS and Fresno in the past two years. Of the 36 courses where grades differed between the two sites, the grade point average was higher for COS students in 17, and higher for campus students in 19. Grading was consistent in all 10 CR/NC courses. Across all the
In addition to expanding access to large-enrollment majors, technology-mediated instruction allows for "niche marketing" of a few high-quality programs that are not widely available. For example, the MS in Engineering is offered at Antelope Valley, and a BS degree in Engineering is being developed for the same site. The Department of Communicative Disorders and Deaf Studies uses two-way video to transmit the upper division major courses in the BA in Communicative Disorders to other California State University campuses (Bakersfield, Hayward, Stanislaus, and soon, Humboldt). In the Communicative Disorders BA courses, performance of distant students is even stronger than on-campus students. Including only grades A through F, in 86 classes offered since fall 1999 both on campus (2,286 enrollments) and televised (833 enrollments), 40 had a higher on-campus GPA, 36 had a higher off-campus GPA, and 10 (CR/NC graded courses) had equal GPA. Looking at all students in all classes included, the on-campus students had an overall GPA of 3.17; the off-campus students had an overall GPA of 3.31.

Several international programs are currently being articulated or are undergoing the curricular approval process. Since 1995-96, undergraduate general education courses have been offered at Kanda Institute of Foreign Languages in Tokyo, Japan. For the first three or four years, Fresno State faculty traveled during the summer and winter intersessions and taught courses on site. In recent years, instruction has moved online, although some face-to-face instruction remains. Courses in Art History, Speech Communication, Linguistics, English as a Second Language, Computer Science, Business Information Systems, Mathematics, Geology, Economics, Geography, History, Political Science, Women's Studies, and Child Family and Consumer Sciences were taught by Fresno State faculty. Japanese students transfer to the Fresno State campus upon completion of 50-60 units of Fresno State accredited courses. An MBA Executive Program in China, to be offered through the Craig School of Business, is anticipated to be implemented by summer 2005. A collaboration with the Swami Sarva Nand Gir Indian Institute of Information Technology in Punjab, India is projected to enroll 30 students in coursework leading to a BS in Computer Engineering.

The university is committed to providing a range of options to faculty teaching in distance learning programs. Technologies currently in use include ITFS (Instructional Television Fixed Services), videoconferencing, streaming video, and web-based instruction using the Blackboard Learning Management System. Instructors often apply a combination of these teaching strategies and technology-based and face-to-face instruction are frequently blended in a single course. Either students or faculty may travel, or an on-site instructor may replace or supplement the campus-based instructor. As is true for our on-campus students, off-site students have access to online student services and library materials, including electronic reserves. Faculty development and grant-supported stipends are being used to promote development of online course materials with the intent of reducing reliance on expensive video-based distance learning instruction.

**Assessing the Impact of Technology on Student-Learning**

Some see computers as a savior for education, while others argue that they make no difference, or worse, interfere with true learning. However, like books, computers are
primarily delivery devices. They can retrieve and organize information, perform billions of calculations, enhance communication, and provide visual displays of information in new insight-provoking ways, but they are only tools, albeit powerful tools. They themselves may or may not make a difference in student learning. As such, it becomes very difficult to prove that the use of computers is enhancing student learning. Initiatives need to be developed to assess the impact of technology on student learning in various contexts and to develop sound methods and approaches for such assessments.

Because the most important key elements for learning outcomes are the teacher and the instructional strategies used, computers can have the greatest impact if they are used in ways that affect the thought process of the students. Evidence indicates that when used effectively, “technology applications can support higher-order thinking by engaging students in authentic, complex tasks within collaborative learning contexts” (Means et al., 1993). Our students appreciate classroom technology. In the Survey of Student Educational Experiences (Appendix A2), most (60%) of the students who reported taking a class in a technology-enhanced classroom indicated that classroom technology had enhanced their learning experience substantially or very substantially, 26% somewhat, and 14% very little.

Assessment of the effect of technology on student learning should examine students’ ability to understand complex phenomena, analyze and synthesize multiple sources of information, and build representations of their own knowledge. Therefore, the university needs to develop and implement initiatives to address effectiveness of technology on teaching and learning. Such initiatives are in place on several campuses. For example, the Indiana University-Purdue University Indianapolis (IUPUI) Technology Assessment Group sponsors a Technology Assessment Grant Program intended to encourage faculty to study the impact of educational technology on their practices and on student, course, or program outcomes. In addition, the IUPUI Center for Teaching and Learning routinely works with faculty teaching technology-based or technology-enhanced courses to help them devise appropriate assessment strategies for determining the impact of technology applications on learning. As the university progresses with Phase 3, enhancing the teaching and learning experience through technology, assessment must become a critical part of the process.
CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The integration of technology to support student learning is demonstrated by the significant and continuing increase in the number of courses offered using the campus course management system. Nearly three quarters of our students are enrolled in one or more courses that use the Blackboard course management system.
Students evidence broad utilization of computers and software, are satisfied with training opportunities and programs, perceive the importance of this technology to their education, and express willingness to support a modest technology fee to enhance these resources.
Faculty laptops and technology-enhanced classrooms have resulted in increased use of technology and the infusion of technology into the curriculum. This trend is expected to continue in the near future.
As the university progresses toward the integration of technology into instruction, assessing the effect of technology on teaching and learning is identified as an important goal.

Recommendations

To the degree possible, the strategic technology initiatives should continue to move forward, even if the pace of implementation must slow due to budget restrictions.
It is critical that Fresno State continue to identify resources to support the infusion of technology and upgrading of the existing infrastructure on campus.
The university should evaluate technology support needs, including training and resources, based on current and future faculty and student use of technology.
Faculty and student collaboration in planning and implementation of technologies are essential success factors.
The university should assist faculty in assessing the impact of technology on student learning as a component of the scholarship of teaching and learning.
D. How Has the Expansion of Faculty Research, Scholarship and Creative Activity affected the Learning Environment?

The university’s strategic plan states:

*Having distinguished itself as a premier teaching institution, the university now seeks to expand its role in the area of research, which includes the scholarship of teaching, application, integration and discovery as described in the university’s “Final Report of the Faculty Scholar Blue Ribbon Committee.” As we move forward with a greater emphasis on applied research productivity on our campus, however, it is critical that we continue to recruit, retain, reward and promote faculty with a commitment to teaching and student-centered learning.*

Within the last 10 years, California State University, Fresno has made significant investment in the support and expansion of faculty scholarship, research, and creative activities, viewed as essential to the university’s primary function as a teaching-centered comprehensive university. In the discussion that follows, the terms “research,” “scholarship,” and “creative activities” are used interchangeably to denote the various types of scholarship carried out by faculty across disciplines.

This investment has been accompanied by the focused recruitment and retention of high quality faculty members with advanced degrees who possess a record of success in scholarship and research. The increased emphasis on scholarship and research has been reflected within the probationary plans for new faculty, in budget priorities (technology upgrades, library materials, intramural grants for projects, including assigned time and travel), and internal recognition for excellence in scholarship. These and numerous other activities have had the effect of gradually shifting the identity of the university from that of a “teaching institution” toward a “teaching and research institution.” The intention of this shift is no better exemplified than by the active work toward development of new joint doctoral programs with research institutions through which the university hopes to achieve
the Carnegie classification of “Doctoral/Research University Intensive.”

It is not surprising that the recent emphasis on research and scholarship has led to discussions of the appropriate balance between teaching, service, and research. In a recent survey of junior faculty members (Appendix D1), most respondents found the expectations for tenure to be clear (94%), appropriate (76%), and equitable (80%). Two-thirds felt that they were provided with the support needed to achieve tenure. However, only about 40% were satisfied with the balance between work and personal life or with the balance among teaching, research, and service, although 60% thought that the balance among roles met the needs of the department and the university. Written comments focused on workload, primarily on the high teaching load rather than on research expectations. The general acceptance of an increasing demand for research is not surprising, as Ph.D. students are educated for a life of research and scholarship rather than a career of teaching. That the university recognizes the burden imposed by a 12-unit teaching load is apparent in the strategic planning goal to “Achieve a faculty workload comparable with competitive institutions nationwide that are committed to a vision to be one of the nation's premier interactive universities.” Of course, current budget restrictions will make this goal difficult to achieve.

The impact of increased faculty participation in research is most apparent in the number of grants submitted and awarded (Figure D1), and grant dollars received (Figure D2). These efforts and successes have been recognized internally and locally (The Fresno Bee, Tues., March 30).

![Figure D1. Extramural Grant and Contract activity: Number of awards submitted](image-url)
In measuring the effectiveness of the steps taken to promote and support scholarship, external factors should be taken into account, although assessing the influence of such factors may be difficult. Of note, state budget reductions in the early 1990s had both direct and indirect effects on faculty scholarly activities. Funds for mini-grants and assigned time were cut, retiring faculty members were not replaced, and faculty workloads were increased. It is likely that increased student fees and declining resources dampened student involvement in faculty research. Student involvement in research can be assessed through enrollments in independent study. Figure D3 shows that enrollment in independent study has only recently begun to rebound. This rebound has been mirrored by increased application for research grant support provided by Associated Students Incorporated (ASI; Figure D4). Such data have been instrumental in directing recent budget-reduction planning processes, which have sought to protect the scholarly activities of both faculty and students.
Figure D3. Enrollment in Independent Study (190 + 290)

Figure D4. Student applications for ASI grants
Faculty Research and Student Learning

The Minority Biomedical Research Support program described as an Exemplar in the Preparatory Report, provides evidence of a nearly six-fold increase in student participation in research in participating departments compared with annual levels prior to implementation of the program. In the recent Survey of Student Educational Experiences (Appendix A2), a substantial number (25%) of students reported having worked with faculty on research or other creative activity. Less than 5% of students felt that the university’s emphasis on faculty research and other creative activities is too high. Students who had worked with faculty members in research were much less likely to be unsure of their opinion, and much more likely to consider the emphasis on research to be about right or too light than those who had not done so (Table D1).

Table D1. Student responses to the question, “Taken overall, the university’s emphasis on faculty research and scholarship is...” categorized by reported experience working with faculty on research or other creative activities.

<table>
<thead>
<tr>
<th>Participated in Research</th>
<th>No</th>
<th></th>
<th>Yes</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td></td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Not sure</td>
<td>822</td>
<td>52</td>
<td>93</td>
<td>19</td>
<td>915</td>
</tr>
<tr>
<td>Too light</td>
<td>266</td>
<td>17</td>
<td>153</td>
<td>31</td>
<td>419</td>
</tr>
<tr>
<td>About right</td>
<td>438</td>
<td>28</td>
<td>229</td>
<td>46</td>
<td>667</td>
</tr>
<tr>
<td>Too heavy</td>
<td>48</td>
<td>3</td>
<td>22</td>
<td>4,</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>1574</td>
<td>100</td>
<td>497</td>
<td>100</td>
<td>2071</td>
</tr>
</tbody>
</table>

Seventy-five percent of both undergraduate and graduate students who reported working with faculty in research or other creative activities at Fresno State indicated that their participation in these activities enhanced their educational experience substantially or very substantially (Table D2). Of these same students, 59% of undergraduates and 70% of graduate students felt that their participation had substantially or very substantially prepared them for their post-graduation goals.

Table D2. Responses of undergraduate and graduate students who reported working with faculty in research or other creative activities to the question, “To what extent did participation in research or other creative activities enhance your educational experience?”

<table>
<thead>
<tr>
<th>Undergraduate or Postbaccalaureate Status</th>
<th>UG</th>
<th></th>
<th>Grad</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td></td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Very little</td>
<td>14</td>
<td>4.5</td>
<td>13</td>
<td>7</td>
<td>27</td>
</tr>
<tr>
<td>Somewhat</td>
<td>64</td>
<td>21</td>
<td>33</td>
<td>18</td>
<td>97</td>
</tr>
<tr>
<td>Substantially</td>
<td>122</td>
<td>40</td>
<td>75</td>
<td>40</td>
<td>197</td>
</tr>
<tr>
<td>Very substantially</td>
<td>108</td>
<td>35</td>
<td>66</td>
<td>35</td>
<td>174</td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
<td>100</td>
<td>187</td>
<td>100</td>
<td>495</td>
</tr>
</tbody>
</table>
We have little information on if or how the increase in faculty scholarship has affected classroom teaching. Students appreciate faculty members who are enthusiastic about the discipline and incorporate first-hand experiences into their teaching. We might expect increased faculty scholarship to result in the inclusion of the most current disciplinary knowledge in courses, better integration of scholarly activities into the curriculum, and evolution of curricula to keep pace with changes in disciplinary emphases. One clear result is the acquisition of upgraded facilities and sophisticated equipment, generally available for both graduate and undergraduate student use. As discussed in the Preparatory Report, centers and institutes such as California Agricultural Technology Institute, the Center for Educational Research and Services, Solutions Center, Viticulture and Enology Research Center, Center for Irrigation Technology, Interdisciplinary Spatial Informational Systems Center, the Center for Food Science and Nutritional Research, and the Human Performance Laboratory, as well as off-campus collaborations with government agencies (e.g., Crime Lab, NASA) and other universities (e.g., University of California at San Francisco) increase opportunities for student involvement in applied research and scholarly activities. Appendix D2 provides examples of the experiential learning associated with a few of these centers.

In addition, as appropriate to the wide-ranging offerings of master’s degree programs as well as the joint doctoral degree, student research and creative work under accomplished faculty is continuing to gain an ever-higher profile. Project, thesis, and dissertation topics frequently involve graduate students with varying sectors of the community; in the last three years (summer 2001-spring 2004), 308 students have completed theses, and of those, 68 have used the expertise of a committee member from outside the university's full-time faculty. Such expertise has come from the county health departments in Fresno, Madera, and Tulare; the United States Department of Agriculture and the Kearney Agricultural Center; State of California departments of Justice and Fish & Game; St. Agnes and Kaiser hospitals and the Sequoia Community Health Foundation; The Fresno Bee and the Merced Sun Star; and the Lemoore Naval Air Station, to name a few. Nearly as many theses (66) have undertaken research into problems and issues unique to the local area. This research has shed new light on topics of regional significance such as crop management, the Hmong culture and community, and asthma, and speaks to the involvement with and concern for the community in which our graduate students live and work. Thesis titles, authors, and committee chairs appear in the newly created Division of Graduate Studies online publication.

CONCLUSIONS and RECOMMENDATIONS

Conclusions

Not only has the university made significant investment in the expansion and support of faculty activities related to scholarship and research, it has also implemented a number of essential changes to support this new direction. These changes include standards used in the hiring and tenure of new faculty, modifications in budget allocations, and the implementation of associated policies and procedures.

The university has been successful in its effort to expand faculty involvement in
research/scholarship activities, as seen by increased numbers of grants submitted and awarded and grant dollars received. A substantial number of students report having worked with faculty members on research or other creative activities, with most of these students providing a highly positive report of their experience.

**Recommendations**

As the university moves to increase external funding, it should not lose sight of the value of research and creative activities in less fundable areas. The university should establish measurable goals and expectations that can be used to make decisions as well as determine programmatic success, thus improving the ability to evaluate and assess further development in this area.

The university should encourage and facilitate the collection and evaluation of data on the effect on the learning environment of faculty participation in scholarship. Of particular importance is the assessment of the integration of research, creative, and scholarly activities into the classroom.
This essay includes the response to two research questions:

- **E.** How has the university's community engagement affected students?
- **F.** How productively is the university engaged with the community?

**E. HOW HAS THE UNIVERSITY'S COMMUNITY ENGAGEMENT AFFECTED STUDENTS?**

Furco's (1996) continuum of student engagement with the community provides a vehicle for viewing various student engagement activities (volunteer work, community service, service-learning, fieldwork, and preprofessional internship) based on the intended beneficiary (student or service recipient) and the level of emphasis on service and/or student learning. This review will collapse the student engagement continuum to three areas by combining volunteerism with community service and by integrating fieldwork and internships. As appropriate or relevant, these each will be examined separately in relation to the four most common categories of impact indicators: academic learning, civic responsibility, career development, and academic aspirations along with personal growth. Absent centrally coordinated assessment processes, this essay attempts to synthesize existing data generated by programs that draw students from across campus.

Campus Compact has recently launched its web site on "Indicators of Engagement Project: Model Programs at Minority-Serving Institutions." Fresno State is recognized as having exemplary practices in 12 of the 13 areas examined.

**VOLUNTEERISM AND COMMUNITY SERVICE**

According to 2001-2002 figures, approximately 2,500 California State University, Fresno students were involved in one-time, short-term, or ongoing volunteer and community service activities via one of several university-sponsored volunteer and community service initiatives (Appendix E1). Combined, these students provided 110,000 hours of service. The effect of such engagement on students may be seen on multiple levels.

Undergraduate participation in volunteerism and/or community service promotes short-and long-term benefits in the form of academic
learning (improved GPA, writing and critical thinking skills), personal growth (increased commitment to activism and racial understanding), and civic responsibility (a lifelong commitment to service as demonstrated by an increased interest in service careers and plans to participate in service after college) (Astin et al., 2000). These benefits are substantial and long-lasting, and extend to personal growth and academic aspirations (Astin et al., 1999). Given the large number of students involved in volunteerism at Fresno State, this impact is most likely being recognized by a significant percentage of the university’s student body. A post-service survey completed by 109 students enrolled in Community Service 1 or 101 fall 2003 supported this assumption (Table E1). In addition to the responses in Table E1, students reported gains in leadership skills (100%), awareness of community (94%), career skills (66%), and commitment to community (63%).

**SERVICE-LEARNING**

Service-learning is distinguished from other approaches to experiential education by its intention equally to benefit the provider and the recipient of the service as well as to ensure equal focus on both the learning that is occurring and the service being provided (Furco, 1996). California State University, Fresno has incorporated service-learning into a significant portion of the curriculum. These efforts have resulted in students expanding their knowledge and understanding of community needs, service and career opportunities, and application of academic concepts outside of the classroom. In addition, service-learning courses are influencing the development of personal skills such as communication and leadership, as well as expanding students' appreciation for diversity.

**Table E1. Student self-report on the impact of service-learning (Fall 2003).**

<table>
<thead>
<tr>
<th>Service Experience Impact on Students</th>
<th>Agreed or Strongly Agreed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expanded their understanding of people in general</td>
<td>95</td>
</tr>
<tr>
<td>Helped them become more comfortable with cultures/groups other than their own</td>
<td>85</td>
</tr>
<tr>
<td>Had a positive effect on their self-esteem</td>
<td>87</td>
</tr>
<tr>
<td>Helped their ability to communicate</td>
<td>93</td>
</tr>
<tr>
<td>Increased their awareness of community needs</td>
<td>83</td>
</tr>
<tr>
<td>Increased their interest in future service</td>
<td>90</td>
</tr>
<tr>
<td>Helped them better appreciate how political and social events impact their community and themselves</td>
<td>74</td>
</tr>
<tr>
<td>Helped them appreciate the importance of education</td>
<td>85</td>
</tr>
<tr>
<td>Enhanced their appreciation for the importance of</td>
<td>94</td>
</tr>
</tbody>
</table>
Increased the value they place on being an involved, proactive citizen.

The university's 2002-03 Service-Learning Report to the Chancellor's Office identifies 82 sections of 30 different courses that utilized service-learning. Overall, 3,000 students each year contribute more than 50,000 hours of service to the local community. The effect of the service-learning pedagogy on students appears in three separate survey-based studies conducted at Fresno State over the past several years (Table E2). Curtis (2003) also conducted focus groups of faculty and representatives of community-based organizations.

### Table E2. Studies of service-learning impact on students.

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Size</th>
<th>Time Frame</th>
<th>Nature of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curtis (2003)</td>
<td>142</td>
<td>Spring 2002</td>
<td>Five courses from Business, Deaf Studies, Communications, and applied social sciences. Students from 38 majors</td>
</tr>
<tr>
<td>Sherwood (200)</td>
<td>655</td>
<td>AY 2001-02 &amp; 2002-03</td>
<td>22 sections of the Marketing Concepts upper-division business core course (9 instructors)</td>
</tr>
</tbody>
</table>

Service-learning increased student awareness of community needs and opportunities for involvement (Appendix E2). The propensity to volunteer increased significantly after taking a service-learning class. The faculty focus group in the Curtis study also reported increases in student commitment to civic participation and sense of duty to the community, as well as an intensified connection to and responsibility for the community.

Most students felt that the service-learning experience enhanced the class and helped them better apply course content. The faculty focus group noted that upper-division students found service-learning to be especially valuable in terms of establishing "real world" connection to academic material. They also reported that students achieved new and deeper connection with faculty via service-learning. Service-learning increased students' perception of their own marketability. The service activity made students more aware of career opportunities in the nonprofit sector, and nearly 20% indicated a change in professional or educational goals as a result of the experience.
While the magnitude of the effect on personal development varied, once again, most students reported this effect to be favorable. Differences can be attributed to the type of assignment (e.g., team or individual) as well as the nature of the contact between the student and the community-based organization (working with staff versus working with clients). The faculty focus group indicated that service-learning improved teamwork skills and led to an increase in critical thinking and problem-solving skills.

Some of the most significant results relate to an increase in awareness of community needs and the propensity to volunteer. All three studies indicate that there is at least a 50% increase in the intent to volunteer as a result of taking a service-learning class. Thus the results of these studies, involving over 1,000 students from a variety of courses, clearly attest to the positive nature of service-learning for Fresno State students.

FIELDWORK AND INTERNSHIPS

Work and internship experience is an integral component of professional preparation programs at California State University, Fresno. During 2001, courses with a field supervision classification number had a combined enrollment of 7,425, over 5% of the university total.

Recent informal survey reports describe the impact of fieldwork/internship experiences on student learning. Two of these focus on teacher preparation (Table E3).

**Table E3. Reports of the impact of fieldwork/internships in teacher education.**

<table>
<thead>
<tr>
<th>Report</th>
<th>Sample Size</th>
<th>Time Frame</th>
<th>Nature of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acevedo</td>
<td>74</td>
<td>AY 2001-02</td>
<td>All students enrolled in Multiple Subject/Single Subject Internships</td>
</tr>
<tr>
<td>(Interns)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chiero</td>
<td>145 master teachers</td>
<td>Fall 2003</td>
<td>Master teacher supervisors for Multiple Subject student teachers</td>
</tr>
<tr>
<td>(Master Teachers)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Internship enrollees responding to the Acevedo survey reported that internship pre-service training made a difference in class management (64%) and that they were able to learn from university supervisors (80%) and from cooperating teachers (88%). Students reported benefiting from Saturday professional development workshops (58%) and from substitute days for professional development (58%).

Student teachers still have much to learn. Master teachers responding
to the Chiero survey reported that less than half of the student teachers maintained effective classroom learning environments (38%), planned developmentally appropriate lessons (46%), responded to diverse K-12 student learning needs (43%), used a variety of appropriate techniques in assessing student learning (32%), or understood subject matter content (28%). However, more than half understood and were prepared to meet required competencies (55%), engaged in reflection or self-evaluation (55%), responded to feedback from others (75%), and adhered to high standards of professional conduct (69%).

Two surveys of university-wide programs provide evidence of the impact on students of field placements (Table E4).

**Table E4. Studies of the impact of fieldwork/internship in university-wide programs.**

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Size</th>
<th>Time Frame</th>
<th>Nature of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solutions Center</td>
<td>120 students</td>
<td>1997</td>
<td>Student responses after completion of center-sponsored projects</td>
</tr>
<tr>
<td>Community Service</td>
<td>260 students</td>
<td>Fall 2000-Spring 2003</td>
<td>Evaluations of program by students and employers</td>
</tr>
<tr>
<td>Scholarship Program</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The **Solutions Center** is a project-based interdisciplinary academic program that involves hands-on learning while providing both students and faculty an opportunity to answer research questions and solve problems posed by a community sponsor. A WASC Steering Committee member reviewed student feedback survey forms from the 26 projects completed since 1997. Students reported gaining much from actual work experience, saw practical application of classroom theory, reported acquiring collaborative problem-solving skills, and felt more qualified to enter the work place. They indicated that their "real world" experiences prepared them for productive employment, and frequently reported being offered jobs upon completion of their projects.

The **Community Service Scholarship Program** is a university-wide program in which participants are required to perform 150 hours of service with a nonprofit organization while receiving a $1,500 scholarship. Overall ratings of the experience by students ranged from 6.6 to 7 on a seven-point scale, where 7 indicated "Excellent." Students reported that their service experience had related to academic studies or career preparation (82% assigned a 6 or 7 rating) and improved teaching skills (50%). A substantial number of participants also reported increased skills in communication (87%), confidence (76%), decision making (70%), problem solving (67%), leadership (64%), and ability to influence others (61%). Employers
surveyed reported positive impressions of student academic learning through increased ability to apply skills and knowledge, as well as personal growth through the ability to communicate more effectively in providing needed services.

The Survey of Student Educational Experiences (Appendix A2) provides self-reported evidence of the extent to which community-based experiences enhanced student learning. Well over half (58%) of respondents indicated that they had previously or were currently participating in volunteerism, community service, or service-learning (Table E5). Very few responded that, taken overall, the university's emphasis on engagement with the community is too high. Students who had participated in service-related activities were more likely to express an opinion about the appropriateness of the university's emphasis on engagement with the community, and that opinion was likely to be positive.

Table E5. Student responses to the question, "Taken overall, the university's emphasis on engagement with the community is." categorized by their indication of current or previous service activity at Fresno State.

<table>
<thead>
<tr>
<th>Response</th>
<th>Previous or Current Service Activity</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Count</td>
<td>%</td>
<td>Yes</td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>Not sure</td>
<td></td>
<td>366</td>
<td>41</td>
<td>217</td>
<td>18</td>
<td>583</td>
</tr>
<tr>
<td>Too light</td>
<td></td>
<td>215</td>
<td>24</td>
<td>368</td>
<td>30</td>
<td>583</td>
</tr>
<tr>
<td>About right</td>
<td></td>
<td>306</td>
<td>34</td>
<td>622</td>
<td>50</td>
<td>928</td>
</tr>
<tr>
<td>Too heavy</td>
<td></td>
<td>16</td>
<td>2</td>
<td>28</td>
<td>2.3</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>903</td>
<td>100</td>
<td>1235</td>
<td>100</td>
<td>2138</td>
</tr>
</tbody>
</table>

More than half (53%) of students who had participated in service-related activities indicated that their experience substantially or very substantially enhanced their educational experience (Table E6).

Table E6. Extent to which students who had participated in service-learning or community service indicated that this activity enhanced their educational experience.

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very little</td>
<td>140</td>
<td>15</td>
</tr>
<tr>
<td>Somewhat</td>
<td>300</td>
<td>32</td>
</tr>
<tr>
<td>Substantially</td>
<td>326</td>
<td>34</td>
</tr>
<tr>
<td>Very substantially</td>
<td>170</td>
<td>18</td>
</tr>
</tbody>
</table>
CONCLUSIONS and RECOMMENDATIONS

Conclusions

• One of the university's strengths in educational effectiveness is its commitment to community service, service-learning, and other forms of community-based experiential learning. Student participants provide consistently positive reports on programs in these areas.

• There is a need for better data and better coordination of the collection of data on program efficiency and effectiveness. It was difficult for the writing team to generalize or make comparisons across programs because of inconsistencies in the collection and analysis of data.

Recommendations

• The university should increase efforts to communicate the importance of and support for faculty and staff in the collection of information about and assessment of student engagement efforts.

• The positive impact of community-based learning documented in this report adds further support to the recommendation from the preparatory report for the formation of a Center for Community-Based Learning (Appendix E3). Such a center would provide a single contact point for faculty, students, and community members; coordinate training and support activities; provide assistance with and coordination of assessment activities; and help with dissemination of information concerning community-based learning activities.
F. How productively is the university engaged with the community?

California State University, Fresno's commitment to engagement with the community is deeply embedded in both its Vision "to be one of the nation's premier interactive universities." and mission:

The university serves the San Joaquin Valley while interacting with the state, nation, and world. The university is a center of intellectual, artistic, and professional activity. Through applied research, technical assistance, training and other public service activities, the university anticipates continuing and expanding partnership and linkage with business, education, industry, and government.

California State University, Fresno is extensively engaged with the community. Nearly 50 centers and institutes originating in all of the schools and colleges facilitate interaction with the community. The capacity of the university in this area was described in some detail in the Preparatory Report. Very recently, the university's commitment to stewardship was recognized when it became one of four campuses nationally to receive a "Making Place Matter" grant from the American Association of State Colleges and Universities, the Kellogg Foundation, and the Alliance for Regional Stewardship. The proposal for that grant (Appendix F1) provides additional evidence of the extent of the university's engagement with the community, the total annual impact of which is estimated to be $348 million (Houser, 2002; document room).

The sheer scope of university-community interactions is overwhelming; therefore, the current essay showcases a selected cross-section in order to illustrate the breadth and depth of California State University, Fresno's
sustained engagement with its stakeholders. Guidelines on university engagement with communities (Boyer, 1996; Holland, 2001; Spanier, 2001; Votruba, 2002) were used to organize this review, which examines how the university deploys four broad categories of human and physical resources (Student Human Resources; Applied Research and Technical Assistance; Education and Training Programs; and Cultural, Artistic, Intellectual, and Entertainment Events) to meet a range of community needs.

**STUDENT HUMAN RESOURCES**

In 2001-2002, approximately 4,800 students performed a total of 193,000 hours of service in the community. These figures, aggregated across many programs (Appendix F2), represent a total economic impact of nearly $3.2 million, not including the significant contributions to the community provided through student clubs and organizations.

Several dozen nonprofit community partners responding to a survey from the Students for Community Service office reported using students from a variety of community service programs and were highly positive about the assistance students provided in meeting community needs (Table F1).

**Table F1. Community Service-Learning (CSL) Survey Responses of Community Partners.***

<table>
<thead>
<tr>
<th>Statement Summary</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>University's CSL programs provide students who help meet our program goals.</td>
<td>2.1</td>
</tr>
<tr>
<td>We (the agency) know whom to contact for information regarding the university's CSL programs.</td>
<td>1.9</td>
</tr>
<tr>
<td>Benefits of partnering with the university outweigh the costs associated.</td>
<td>2.4</td>
</tr>
</tbody>
</table>

*7-point scale, where 1 indicates "Strongly Agree" and 7, "Strongly Disagree" Source: California State University, Fresno. Students for Community Service Office.

Curtis (2003) analyzed community-based agencies' ratings of the value of the university's service-learning programs:

Almost two-thirds (64%) of the community representatives reported that they had attended training or seminars related to service-learning. Over 90% of those reported that they were somewhat satisfied or very satisfied with their overall experience.

All respondents (100%) reported that the service provided by students was helpful to their organization.

Almost all (92%) of the agencies who utilized service-learning students felt that the experience strengthened their relationship.
Impact data are available for a number of community-based programs. A 2002-03 survey of 166 agencies participating in the Community Service Scholarship Program found that 85% felt that the students' impact on the agency's ability to provide services was significant, while 89% found that the student's ability to apply skills and knowledge to this assignment were better than most. The Craig School of Business tracks business student internships. In 2002-03, 240 students took part in internships with 134 different business, government and nonprofit agencies. Over 80% of employers rated the student skills as good or very good (Young, 2003; document room).

Liberal Studies Senior Projects (EHD 115) involve after-school one-on-one, supervised tutoring on a semester-long basis. Emphasis is on reading, writing, spelling, comprehension, social skills and self-image building for the at-risk children involved. In fall 2003, 211 students were enrolled in the course, with involvement at six elementary schools. Each student provided approximately four hours of tutoring per week. Support letters from 24 teachers and administrators praised the program for its production of positive gains in children's academic skills and behavior.

Jumpstart Fresno and Fresno READS provide high-quality tutoring programs to pre-kindergarten and K-6 children respectively. Together, these programs annually provide approximately 23,000 hours of tutoring to area children. Studies of the Jumpstart Fresno program clearly indicate that it enhances the academic preparation of preschool children in our area (Appendix F3).

Stone Soup Fresno, a local nonprofit organization, and California State University, Fresno began a partnership in 1993 that has transformed one of the most disadvantaged and crime ridden neighborhoods in the city of Fresno. According to the 1990 census, the El Dorado Park neighborhood, which is located just west of the Fresno State campus and is the focus of Stone Soup, was heavily populated with refugees from Southeast Asia and was home to the largest concentration of children living under the poverty level in the entire state. Now some of those children are graduates of Fresno State who contribute to this community's continuing revitalization efforts. While significant challenges still exist, many positive changes have resulted from the collaborative efforts of Stone Soup and the university. For example, in the early to mid 1990s this crime-ridden area had the highest number of calls for police assistance in the entire city of Fresno. A dramatic reduction in crime and gang violence has helped transform this area into a stable and productive community. Stone Soup is the number one user of Fresno State volunteers, with over 300 students and approximately 70 faculty and uncounted staff members who take part in Stone Soup service efforts each year (Appendix F4).
APPLIED RESEARCH and TECHNICAL ASSISTANCE

California State University, Fresno has 45 centers and institutes that are responding to local and regionally identified needs of the business, education, government, and nonprofit sectors.

The University Business Center (UBC) operates a number of programs that have a substantial impact on the local economy in the form of small business startups, development, and expansion. Two of the current programs operated under grants are the Small Business Development Center (<http://www.ccsbdc.org/frames.html>), and the AcceleratorOnline Program (<http://www.acceleratoronline.com>).

The Small Business Development Center (SBDC) (2002) offers services and training for business start-up and expansion, marketing, accounting, loan packaging, and entrepreneur assistance. In 2002, the center arranged for 48 equity financings for a total of $2,046,394 and 92 loans for $12,452,170. These financings involved 29 business start-ups, in addition to business continuations and expansions that resulted in retaining 362 jobs and creating 246 new jobs. On the training side, the SBDC provided 277 workshops, courses, and other types of training sessions (8,961 total hours of training) attended by 2,595 individuals, including 1,500 minority individuals and 1,657 women.

AcceleratorOnline Program is a two-month, instructor-assisted, online business plan development and launch initiative designed for those who are traditionally disenfranchised from university programs. Graduates are provided with ongoing consulting to ensure successful launch of their business. The program now has an e-commerce component, and an export planning component was added in the spring of 2004. During 2001-03, 148 participants completed the program. Ninety-one started their own business, with 22 now generating revenue ranging from $20K - $100K.

The Center for Research, Education, and Dissemination (CREAD) was established in 1999 and provides research, data analysis, and evaluation services to school districts, postsecondary institutions, private foundations, grant projects, and other agencies requiring professional services. For example:

In 2002-03, the center undertook an evaluation of the effectiveness of Fresno County schools in promoting the importance of agriculture career opportunities and integrating agriculture awareness activities in K-8 classrooms. CREAD evaluated the effectiveness of the 2002 Summer Bridge Program to influence positively those participants who expressed an
interest in agriculture or science.
CREAD carried out a comprehensive evaluation of the Peer Assistance and Review (PAR) Program run by the Fresno Unified School District. The focus of the 2002 study was to determine the effectiveness of PAR and Beginning Teacher Support and Assessment programs in integrating new teachers in the classroom. The center conducted an evaluation and statistical summary of after-school program (2001-02) outcomes for Fresno County, involving 8,772 students as well as teachers at 51 school sites. CREAD became the Intermediate Intervention for Under Performing Schools for eight schools in the Hanford Elementary School District in 2001-02, and continued to work with them in 2003-04. Similar services were provided to two Fresno Unified School District schools in 2002-03.
With funding support from the National Science Foundation, CREAD developed a new certificate in program evaluation. This program responds to a need identified in both K-12 and postsecondary contexts for evaluators for externally-funded programs, for core curricula evaluations, and for educational reform efforts.

The Fresno Family Counseling Center provides low-cost services to families in the Fresno Unified School District who otherwise would not have access to needed professional care. Counseling is provided by university graduate students under supervision of licensed faculty via remote television. The district contributes $30,000 under the MOU and the university contributes $60,000 worth of services, while leveraging another $27,000 in external funding. Although the MOU calls for 1,500 hours of services, the district received 2,500 hours; considering the market value of the counseling, the school district saved $146,960 in AY 2001-02 (Appendix F5).

The Central California Center for Health and Human Services is a dynamic and fast growing research, training, and outreach organization that provides administrative and operational support for externally funded projects that respond to community needs. AY 2003-04 funding exceeded $3.9 million in grant awards, atop $5.4 million the year before (Appendix F6). The center currently has 11 established programs (including three institutes, a center, and an academy). Its newest initiative is the formation of an interdisciplinary "Air Quality Resource Group" to help address a serious health issue in the San Joaquin Valley. The project has been strongly promoted by the local newspaper, The Fresno Bee, since the region has been rated second worst in the nation for air pollution by the Environmental Protection Agency.

**EDUCATION and TRAINING PROGRAMS**

The Young Writers Conference (YWC) is a full-day creative writing conference for area high school students and their teachers. It includes an annual literary magazine, Spectrum, featuring work by attendees; writing awards for students, writers, and teachers; a keynote address by a published
writer; and small writing workshop sessions.

The YWC has been held each spring on the Fresno State campus for 24 years, organized and sponsored by the MFA Program in Creative Writing, the Department of English, and the College of Arts and Humanities. Each year, 350 to 400 students from 15 to 20 schools participate in the conference. Approximately 30 Fresno State graduate students are involved each year, helping to organize the conference, edit the annual conference literary journal, judge contests, and lead writing workshops.

**State Curriculum Projects** are collaboratives involving professional preparation faculty, academic faculty and area public school teachers and administrators. They are focused on providing teachers with the latest developments in research, methodology, and best practice. Typically, they include summer institutes for teachers, which in turn are followed throughout the school year by workshops and meetings that provide assistance in the implementation of innovative and more effective teaching strategies.

The Kremen School of Education and Human Development currently houses five state curriculum projects: Writing (since 1985), Mathematics (since 1989), Science (since 1994), History/Social Science (since 1997), and Reading and Literature (since 1998). One example of the effectiveness of these projects is provided in a brief summary of the accomplishments of the San Joaquin Mathematics Project. Since its inception, this project has been responsible for the following:

Over 1,000 K-12 mathematics teachers have participated in residential summer institutes, Saturday workshops, leadership development retreats, district partnerships, and online forums for teachers and university faculty. A weekly newsletter, the *California Online Mathematics Education Times (COMET)*, which now has over 2,000 subscribers, keeps teachers professionally current and thus more knowledgeable, resourceful, confident, and effective. Since 2002, the project has sponsored 102 partnerships, institutes, and workshops while serving 500 teachers (60% from low-performing schools), and has provided professional services to a total of 158 schools (56% of these, low-performing schools).
CULTURAL, ARTISTIC, INTELLECTUAL, and ENTERTAINMENT EVENTS

The university's most public face is through the numerous and varied cultural entertainment events produced by departments throughout the campus. Further, the recent opening season of the Save Mart Center, with its accompanying influx of high-profile acts and events, has brought to the region an exciting new arena that serves as a strong drawing card for major sports, cultural, and entertainment events. According to Pollstar Magazine, in the first half of 2004 more than 170,000 tickets were sold for events other than competitive sports events, making the Save Mart Center the tenth busiest such venue in the world.

In the area of overall university entertainment, the heaviest volume of attendance is for athletic events. Within the last year, 670,400 people attended games played by our NCAA teams. In ticket sales alone, athletics generated 1.3 million dollars. When profits from concessions, souvenirs, and off-premise sales are also considered, the economic impact of athletic events is clearly significant.

The College of Arts and Humanities sponsors over 300 public events, with an annual attendance exceeding 200,000. In addition to its 172 public performances, the Department of Music also sponsors clinic/workshops for students, amateurs, and professionals from across the state. Performances include the annual Central California Flute Festival, Day of Percussion, Wind Ensemble Festival, and Choral Invitational. In 1954, the 70-member Fresno State College Orchestra became the Fresno Philharmonic. The music faculty and students, including the new on-campus University High School, are involved in performing groups throughout the area.

The California State University Summer Arts Program has achieved record participation and attendance since moving to the Fresno State campus five years ago. Last summer 64,000 people attended 40 performances by the 500 students and instructors during the four-week program.

Main stage productions by the Theatre Arts department attract another 60,000 patrons. In addition to on-campus performances, the department tours elementary schools throughout the valley. Since 1968, Theatre for Young Audiences has brought live theatre to 15,000 students annually. Its productions emphasize scripts that represent a variety of cultures and the perspectives of the ethnically diverse populations found in the surrounding areas. Recent productions have used bilingual scripts, nontraditional casting, and audience participation as ways to reach a broad multilingual audience. Productions have also sought to link the shows...
produced to the current elementary curriculum and state standards.

A valley tradition for 46 years, the Department of Communication's Peach Blossom Festival spotlights oral interpretation skills, attracting 5,000 K-6 students and utilizing over 400 student volunteers. A new opportunity for school children is the four-year-old Downing Planetarium. With its 30-foot dome and 74-seat theatre, the planetarium is already visited by 30,000 people annually.

It will soon be easier for both campus and community audiences to learn about upcoming events, as the university is adopting web-based scheduling software that will make it possible to publish and maintain online a master calendar of events.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Overall, the evidence indicates California State University, Fresno is extensively and successfully engaged with the community in addressing needs and having an impact appropriate to its vision of being a "premier interactive university."

1. Although the writing team struggled to bring together information from scattered sources, it is clear that the university is broadly engaged with the community, and that students, faculty, and staff members across campus participate in service activities.
2. The university is addressing a wide spectrum of community issues, involving both the private (business/industry and not-for-profit organizations) and public (educational districts and government agencies) sectors through a variety of collaborative modes ranging from contracts, grants, and memoranda of understanding to more informal associations.
3. The university clearly is meeting important needs of community constituencies, as evidenced by satisfaction feedback and performance evaluation surveys, repeat attendance/business, extended relationships, renewed partnerships, and continual funding support.

Recommendation

The university should take full advantage of the opportunity provided by the Making Place Matter project to reexamine the alignment between university activities and community needs; explore means of increasing
community understanding of the university's capabilities; and increasing the capacity to assess and disseminate the results of university-community interactions.
The Vision of California State University, as set forth in the strategic plan, *Vision for the 21st Century: a Plan for Excellence*, states:

Our vision is to be one of the nation’s premier interactive universities, recognized for quality teaching, transformational scholarship, and cultural leadership for the benefit of society.

We believe that the current response to the Educational Effectiveness review provides significant evidence that great strides have been made toward that vision.

**Opportunity – “Access to Quality Programs for Diverse Populations”**

As indicated in our response to research question A, “How does the university advance student learning and its own improvement in achieving student-learning?” the past few years have seen considerable progress in assessing and strengthening our programs through outcomes assessment. Much remains to be done to make this ongoing appraisal and reform a permanent part of the university culture, but we can take some satisfaction in the steps that have been taken and in the evidence of current program quality.

The information developed in response to research question B, “How effective are academic and student support programs in meeting the needs of first-year undergraduate students and improving retention and graduation rates?” demonstrates not only our past accomplishments in fostering student success but also the ongoing commitment to improvement in that area through the recommendations of the Student Success Task Force. The commitment to opportunity remains strong.

**Exploration – “Discovery of Knowledge, Self, and Society through Expanding Horizons”**

Dramatic changes have been made in the integration of technology in
instruction as shown in the response to research question C, “How effectively has the university integrated the use of technology to support teaching and learning?” Both faculty and students have demonstrated willingness, even eagerness, to enrich on campus instruction and the data indicate that our efforts in distance learning have successfully brought quality instruction to students for whom access to the campus is limited. An important challenge to the academic community posed in this response is the need for concrete evidence, beyond mere satisfaction, of improved student learning.

The remarkable increase in faculty research, scholarship, and creative activity evoked research question D, “How has the expansion of faculty research, scholarship, and creative activity affected the learning environment?” The evidence shows that a significant fraction of students have engaged in research, and a majority of those feel that their preparation for post-graduate activities is substantially improved and that their experience at the university was substantially enhanced. We also came to realize that the university needed to clarify its purposes and its assessment in this area.

Interaction – “Transformation through Integration of Knowledge and Experience”

As shown in the response to research question E, “How has the university’s community engagement affected students?” the combination of volunteer/community service, service learning, and fieldwork and internships have had an impact on a large number of students and the testimony of those students gives strong support to the conclusion that that impact has been overwhelmingly positive. As with some of the other issues explored in this review, greater coordination and more universal assessment appear desirable.

The other side of the university-community engagement is explored in the response to research question E, “How productively is the university engaged with the community?” It is clear again that that engagement is substantial and well received. Volunteer, community service, and service learning programs have made significant contributions to both government agencies and NGOs. A variety of programs, ranging from School of Education internships to the planetarium to cultural activities and competitions, have strengthened the K-12 student experience throughout the region. Business,
scientific, and agricultural expertise has bolstered both private and public entities, and the wide range of cultural and athletic events has directly served the population as a whole. Most of these activities were internally initiated in response to potential program benefit and campus perceptions of community need. An important recommendation arising from the response calls for taking advantage of the Making Place Matter project to check the alignment between university activities and community needs, as well as to establish better means of disseminating information about the university’s capabilities.

Apparent through these analyses are several strengths:

- There is a broad acceptance of the university vision and a commitment to the core ideas of the themes.
- Unit autonomy, coupled with that acceptance and commitment, has fostered significant experimentation and entrepreneurship.
- Experiential learning, in all its forms, has led to much positive faculty-student interaction.
- The strategic planning over the last decade has had a major impact upon the university.
- The sense of responsibility to the region is strong and widespread.
- There is a growing commitment to a culture of evidence.

There also emerge opportunities for improvement:

- More effective communication, both on and off campus, of our capabilities, strengths and accomplishments is needed. Especially under budget restrictions, we may need to focus our energies more tightly on high priority activities and programs.
- Data collection is of mixed quality and utility and several departments are not yet persuaded of the value of assessment.

**Recommendations**

Recognizing that the eighteen recommendations resulting from analysis of the six research questions are too many to address effectively, the WASC Self-Study Steering Committee proposes the following priority items to the campus:

- The university should provide sufficient resources and support to academic programs to assist in continuing and in
expanding assessment activities. The university needs to encourage communication about best practices for achieving and assessing student learning. This may include providing a venue for publication of program reports on the progress of implementation of assessment plans. All student support programs must initiate systematic assessment planning to substantiate program effectiveness and to ensure continuous funding. Confirming the conclusion of the Preparatory Review, full implementation of the recommendations of the Student Success Task Force is critical. The university should assist faculty in assessing the impact of technology on student learning as a component of the scholarship of teaching and learning. The positive impact of community-based learning documented in this report adds further support to the recommendation from the preparatory report for the formation of a Center for Community-Based Learning. Such a center would provide a single contact point for faculty, students, and community members; coordinate training and support activities; provide assistance with and coordination of assessment activities; and help with dissemination of information concerning community-based learning activities. The university should take full advantage of the opportunity provided by the Making Place Matter project to reexamine the alignment between university activities and community needs; explore means of increasing community understanding of the university’s capabilities; and increasing the capacity to assess and disseminate the results of university-community interactions.

Rather than considering these as additional strategic goals, we intend to use these recommendations to continue to tighten our focus, as was recently done with respect to the university’s strategic planning goals. We note that six of the seven top recommendations resulting from the educational effectiveness self-study emphasize assessment. While this emphasis may result in part from the charge given to the writing teams to produce an evidence-based document, it is also an indication of the extent to which the university is moving towards a culture of evidence. Indeed, the university will be strengthening the Office of Institutional Research, Planning, and Assessment with the addition of an analyst whose primary responsibility will be assisting programs in the documentation of educational effectiveness.

The opportunity to concentrate on a small number of research questions for the Educational Effectiveness Self-Study allowed detailed
examination of several significant issues. We were able to expand upon and consider more analytically the largely descriptive content of the Preparatory Report. We look forward to the October Educational Effectiveness site visit. Based upon our experience with the Preparatory Review, we anticipate that the Educational Effectiveness Review will be valuable in identifying key next steps in our institutional journey.