UC MERCED APPLICATION TO THE WESTERN ASSOCIATION OF SCHOOLS AND COLLEGES FOR CANDIDACY--PART TWO

EDUCATIONAL EFFECTIVENESS REPORT

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EDUCATIONAL EFFECTIVENESS REPORT

INTRODUCTION

The following Educational Effectiveness Report responds to the second Western Association of Schools and Colleges requirement for Candidacy. In this report, UC Merced will present its current and evolving approach to assuring educational effectiveness in all its academic programs, both through refinement of plans for assessment and continuous improvement, and through examples in which these plans have been applied and acted upon, drawn from the first year of campus operations. In particular, the first-year examples will demonstrate UC Merced's approach to gathering data on student learning, through student surveys and analysis of student coursework, then applying analyses of that work to educational improvement.

The May 12, 2006 report of the WASC Visiting Team, including findings, critiques, and recommendations based on the December 2005 UC Merced Preparatory Review Report and Team visit on March 8-10, 2006, has given UC Merced the opportunity to focus its Educational Effectiveness Report further. Part I below will outline issues to be covered, both those raised by the Visiting Team and those identified by UC Merced in its Preparatory Review Report as special foci for the Educational Effectiveness Report. Part I will discuss progress in resolving the Visiting Team-identified issues. Part III will report on the outcomes of assessment activities during the first year. The Conclusion will discuss how UC Merced is integrating what is being learned into a cohesive assessment and continuous improvement plan.

<u>Part I: Outline of Educational Effectiveness Issues and Assessment Activities and Results</u>

The May 12, 2006 WASC Visiting Team Report concluded that UC Merced was making good progress in meeting the WASC Standards for Accreditation. A number of areas were singled out for special commendation, including UC Merced's special role in the San Joaquin Valley, initial success in attracting underserved groups of students, proactive intervention to foster student success, curricular innovations, and a strong relationship between Academic Affairs and Student Affairs. The Team also zeroed in on a number of areas needing further work and improvement, with recommendations on how to foster those improvements. These areas were flagged throughout the Team Report, sometimes with notations that the Team wanted to see progress in addressing them either by the time of the Team's return visit in October 2006 or during the Initial Accreditation review. The Team confirmed that the UC Merced-identified activities to be highlighted in the Educational Effectiveness Report were appropriate. Finally, the Team made two formal recommendations on activities to be completed before the October 2006 return visit.

The UC Merced Preparatory Review Report and May 12, 2006 Visiting Team Report can be viewed by clicking on the Candidacy link on the UC Merced Accreditation website at http://accreditation.ucmerced.edu/

Principal Issues Arising from the WASC Visiting Team Report on the Preparatory Review

- A. <u>Formal recommendations</u>
 - Establish the Teaching/Learning Center, with coordinating responsibility for all campus assessment activities focused on student learning. The Visiting Team Report also included a related recommendation that the Center assume the role of orienting new faculty to improving teaching and learning, and to learning outcomes
 - Hold a retreat to reflect on lessons learned during the first year and directions for the second year
- B. <u>Global recommendations</u>
 - Focus on strategic enrollment planning and meeting enrollment goals
 - Engage students more fully in campus development
 - Engage Valley, community and other external stakeholders in planning
 - Continue the current strong relationship between the academic enterprise and Student Affairs
 - Address the "too many hats" workload issue
 - Modify/invent procedures to align them with UC Merced's distinctive mission and students: don't lose the chance to innovate
 - Plan for scalability in student research, interdisciplinary general education courses, service learning, and Academic Affairs/Student Affairs collaboration.
- C. <u>Thematic Recommendations</u>
 - 1. Develop a holistic plan for educational effectiveness and continuous improvement, including a framework that connects various assessment activities

- Flesh out assessment plans for the majors, making them known to students
- Fully develop a teaching evaluation system, with an emphasis on formative as well as summative evaluation, rewards for teaching improvement, and support for classroom research
- Sustain the focus on students and learning as new faculty arrive, through the teaching/learning center, faculty orientation and mentoring, program review, and faculty personnel advancement processes
- Increase the campus capacity to analyze and use data, as well as direct evidence of student learning
- By initial accreditation, establish timetable for program review
- Add more upper division courses in the interests of meeting transfer student needs.
- 2. Concurrently, work on improving student services
 - Plan for sustainable student intervention and success strategies
 - Assure seamlessness in the various student advising services.

Initial Results Signifying that a Culture of Evidence and Continuous Improvement Is Developing at UC Merced

While the efficacy of the Teaching/Learning Center, learning outcomes assessment, and evaluation of instruction will need to be determined over the upcoming years, UC Merced has begun assembling, analyzing, and applying evidence of student learning and success in a number of settings. Notably, the most venturesome elements of the curriculum-the Core Course sequence, required of all students, and the Service Learning Program in Engineering—have undergone extensive evaluation and improvement during the first year. In addition, given the large size of the freshman class, the Writing Program has been scrutinized and adjusted as needed. The graduate programs have entered a multiyear evaluation process as they make the transition from emphases within the Individual Graduate Program to stand-alone master's and doctoral degree programs. An in-house survey of the student experience during the first year has been followed with participation in the National Survey of Student Engagement (NSSE), which affords the opportunity to benchmark the UC Merced student experience against that at similar universities around the country. In addition, UC Merced's participation in the UC-based Undergraduate Experience Survey (UCUES) has produced additional student feedback, reflected in this Report. Finally, all Student Affairs services have been evaluated and results have been the focus of a Student Affairs retreat to improve the effectiveness of those services during the second year. The results of these activities point to UC Merced's approach to

continuous improvement and together will provide the initial data and analysis for orientation of new faculty and reflection on lessons learned from the first year of operation as a basis for setting the course for year two and the future.

In summary, this Report will discuss the following:

- A. Experimental Curricular Programming: Applying Learning Outcomes, Assessment, and Revision to the Core Course Sequence and Service Learning Program
- B. Groundwork in College Content and Skills: Merced Writing Program
- C. Progress in Graduate Program Development
- D. Improvement of Services to Support Student Success: Results of First-Year Assessments in Student Affairs
- E. The Students Speak: Evaluation of the First Year Experience at UC Merced: Results from NSSE and UCUES

Part II: Progress in Achieving Educational Effectiveness: New and Updated UC Merced Plans for Assessment and Continuous Improvement Activities

Because UC Merced has completed just one year, with freshmen, juniors and graduate students only, with full results from assessment activities yet to come, emphasis in this section will be on UC Merced plans for addressing issues raised by the Visiting Team, including progress in sharpening learning outcomes and assessment plans. Knowing who UC Merced's students are and will be is essential to planning strategies for program delivery and student success. A special theme in this section and in Part III will be ways in which UC Merced is seeking to understand its students and their needs better, and to apply those findings to both planning for enrollment management and improving campus services that support student success. The assessment results in Part III contain many insights into UC Merced's first-year students, the ways in which they learn best, and their feedback on UC Merced's programs.

Part II will discuss the Visiting Team issues and recommendations under the following topics:

A. Enrollment Growth Management

B. Planning for a Teaching/Learning Center with Leadership in Campus Assessment Activities

C. Steps to Improve UC Merced's Teaching Evaluation System

D. Updated Learning Outcomes and Assessment Plans

- E. Sustaining Student Success Interventions and Providing Seamless Student Advising
- F. Engaging Students and External Stakeholders in UC Merced Planning
- G. Collecting, Analyzing, and Applying Data to Support Continuous Improvement
- H. Pausing to Reflect: Retreat Plans

Topic A.Foster Enrollment Management Planning to Support
Achievement of Enrollment Goals

Because the WASC Visiting Team was concerned about UC Merced's progress in meeting enrollment goals set for it, the strategic planning represented in the June 9, 2006 Enrollment Summit is reported here in detail. The Summit was organized in light of the likely difference between initial plans for new student enrollment in the second year and the actual likely enrollment. The purpose was to understand better the reasons for the differences and to plan a series of strategies to improve recruitment and create a more realistic enrollment growth plan. The complete summary of the Enrollment Summit, including analytical findings provided by the Office of Institutional Planning and Analysis, can be found in Exhibit 4.1-8.

Official Budgeted Projections

The official budgeted enrollment projections for UC Merced, developed before the campus had opened, or even recruited the first students, created the expectation for 1,000 FTEs in the first year, then an additional 800 FTEs each year thereafter through 2010-11, when we would reach a total of 5,000 FTEs. This was considered our break-even point, as long as the FTE/Faculty ratio reached 18.7 to 1 and other resource assumptions were met.

UC Merced's first year (2005-06) produced 865 FTEs. Many of the students attracted to the campus in the first year came, at least in part, because they were excited about being part of the very first class --- pioneers. It is apparent that the second year not only will not make up for the "shortfall" from the first year but also will not produce the expected 800 FTE growth. Instead, more realistically, we expect the FY 2006-07 total FTEs to be around 1250-1300. This would be a growth of about 380-430 FTEs.

Chancellor Carol Tomlinson-Keasey opened the Summit with these observations:

- Our new student enrollment for Fall 2006 has not reached the 800 new students we had expected, but it is a perfectly healthy number for this stage in UC Merced's growth. The last three UC campuses experienced ups and downs in enrollment growth in their first years.
- A realistic enrollment plan needs be developed, perhaps one that involves cooperation with other campuses. The Executive Vice Chancellors at the other UC campuses and officers at the UC Office of the President (UCOP) have expressed a strong willingness to help us achieve our enrollment goals.

UCOP Director of Admissions Susan Wilbur underlined that although enrollment planning has historically been a campus matter, UCOP stands ready to help UC Merced in our efforts to improve enrollment numbers.

Ms Wilbur made several points about the current state of enrollment activity at UC:

- UC campuses have been in a growth mode at the undergraduate level owing to the increased number of high school graduates in California.
- Admission decisions tend to overlap between campuses—i.e., 7,000 students were admitted to both UCLA and UCSD last year. This is good for the students, because it allows them more choices in selecting a campus, but it is not ideal for campus planning efforts, and in fact can wreak havoc with meeting freshman enrollment targets.
- The current UC practice of using a "referral pool" system achieves the goal of offering a space to every UC eligible student, but actual enrollments from the pool are very low, as students choose to go outside the UC system (usually to a CSU) when they do not gain admission to their UC campus of choice.
- > Tensions at work in admissions planning include:
 - Cooperation vs. competition
 - Supply vs. demand
 - Efficiency vs. improvements in process
- With the imminent end of "Tidal Wave II's" population increase (approximately 2009), we can expect the number of high school graduates to level off, which will increase the campus' competition for students. This shift to a "buyer's market" will make enrollment planning more difficult and increase each campus's need to effectively market to attract more applicants.
- Ms. Wilbur offered ten suggested strategies which UC Merced could use to respond to this enrollment environment. They will require cooperation between UCOP and UC Merced:

Focus on increasing applications

- 1. Utilize Eligibility in Local Context (ELC) database to target UC-eligible students. These students receive a letter notifying them of their eligibility to attend UC. UCOP would include a UC Merced brochure.
- 2. Guarantee admission to UC Merced to all ELC-identified students, perhaps offering other perks such as guaranteed housing or scholarships as well.
- 3. Guarantee UC Merced admission to all "Qualified-on-Track" students. These are the students who are UC-qualified, just not in the top 4%, but who are on track to eligibility. Build early awareness through marketing tools such as targeted mailers to students with special interests, etc. Start as early as sophomore year of high school to let students know about UC Merced.

Focus on Admission

- 4. Implement an "Admission-in-the-Field" program. Admit students on the spot during campus visits or other events.
- 5. Notify admitted students early, perhaps offer perks for early Statement of Intent to Register (SIR)/enrollment. This is a "student-friendly" option.

- 6. Reengineer the "referral pool" process by contacting all UC applicants and offering to add application to UC Merced at no cost. This could help students feel as if they are particularly wanted at UC Merced, instead of being referred here at the end of the process.
- 7. Strengthen communications messages and utilize enhanced communication strategies. Create personalized communications according to specific interests or background. Customize and personalize.
- 8. Establish "UC Merced Scholars" program and other more attractive financial aid to reduce net cost to students.
- 9. Utilize the UC Counselor's Conference being held on campus this fall to UC Merced's advantage. Highlight UC Merced to increase counselors knowledge about the campus.
- Explore possibility of dual admissions opportunities through which students could spend a quarter, semester, etc. at another UC campus. Highlight the UC in Washington DC and Education Abroad programs.

UC Merced Director of Admissions Encarnacion Ruiz and Director of Institutional Planning and Analysis Nancy Ochsner highlighted findings based on data gathered from applicants, followed by ideas on how to improve the yield:

Why Admitted Students Did Not SIR at UC Merced

(Based on survey of admitted students when they formally declined to SIR)

790 admitted students responded to the survey.

The top **reason** for declining to SIR was that the student body is too small (45.8%). The second reason was that campus facilities were not impressive [buildings not finished, etc.] (25.9%)

Third was that their intended major was not offered (17.2%).

The fourth reason was that they did not get the information they needed (15.9%). Financial aid was the fifth choice (12.8% said they received more financial aid elsewhere).

9.2% said that the location of the campus was not appealing.

About 13% visited UC Merced on their own

1.5% attended Bobcat Day

3.3% participated in a tour program in March/April/May

39.4% took the UCM virtual tour (website)

For those who indicated that they planned to **attend another college**: 90% said they were planning to attend a California college

67% at another UC (largest proportion going to Davis--- 20%)

12% at a CSU (largest proportion at San Luis Obispo---5%)

8% at private colleges

3% at CCCs

10% at out of State colleges

My **decision** to enroll may have been **different if** (n=231):

- 14% Major not offered, or lack of variety of majors
- 13% Distance from home
- 12% Campus lack of academic reputation
 - UC Merced must work to set itself apart from other campuses and to build our academic reputation—we have yet to find our "niche" in the system, and are currently often a "backup" school for those applying to other campuses.
 - We should learn more about what types of programs are most in demand for our potential students.
 - ➢ We need more students to visit the campus. The website is not adequate especially the virtual tour—to meet the needs of our prospective students.

Professor Michael Colvin, Chair of the UC Merced Undergraduate Council, examined UC Merced's current major programs: are we meeting our potential students' wants/needs? He concluded that:

- We need to base our planning more on what majors students graduate with rather than the majors they intend to pursue when starting university work. A majority (around 50%) of UC grads are in the social sciences, especially psychology.
- Not only must we expand our major offerings, we need to be sure to give our majors titles that are recognizable to incoming students—UC Merced does offer many in-demand programs, but tends to use names which may be unfamiliar to many high school students. Perhaps we should consider "repackaging" our programs to look more like traditional majors.
- > UC Merced lacks several popular major areas, including:
 - Political Science
 - English
 - Chemical Engineering
 - Fine & Applied Arts
 - Communications
 - Ethnic Studies
- Our management program is relatively unique and potentially very popular, but needs development/refinement to set it apart.
- Develop a create "your own major" program. [Later in the meeting, UC Santa Cruz Executive Director of Admissions Kevin Browne described the way in which UCSC students can create their own major, assignment of students to "advising clusters," and the value of listing graduate programs in marketing literature for undergraduates as a way to show breadth of institutional offerings.]
- Discuss putting "advising clusters" on the application.
- Change Management Program from a BA to a BS.
- ▶ Re-do lists of UCM majors to include MA/PhD programs.
- Get as many of our current students as possible to go back to their high schools and discuss their UC Merced academic experience.
- > Find out from OP the deadline for adding more majors to the application.

- Professor Shawn Kantor indicated that there are proposals going to the Undergraduate Council to establish Economics and Cognitive Science majors.
- > Develop and market more BA/MA or BS/MS programs.
- Streamline articulation to make it easier for students to transfer into UC Merced.

UC Merced Director of Financial Aid and Scholarships Diana Ralls reported on the role of financial aid in applicant decisions to attend.

- Scholarships are more important to students than grants
- It is beneficial to offer early awards of donor-based scholarships—students tend to feel a personal connection with the donor and the institution
- > For freshman admits, higher awards equal more takers
- Research from Institutional Planning and Analysis (IPA) shows that financial aid was extremely important in students' decision to attend UC Merced.
- UC Merced should request support from OP for additional financial aid/scholarships.

The Summit considered a variety of ways to attract more students:

Program to Redirect Students:

- The UCSC/Berkeley redirect program was successful in that it tended to draw a higher-caliber of students to the UCSC campus, half of whom decided to stay and finish their degrees there. On the other hand some of the redirected students were unhappy at having been forced to attend a "second-tier" campus for their first two years.
 - Summit discussion concluded that there was support for a limited redirect program, possibly between Berkeley and UC Merced in, for example, engineering.

Enrollment Yield Events:

- Unfavorable messages regarding the "total student experience" are affecting student choices; we must find a way to get more positive messages out
- Need faculty to be involved in yield events.
- Need to develop new messages about the UC Merced experience. Why is it special?
- Bobcat Day should be later in the year. Possibly rethink its size and scope.
- Get more potential students on campus more often—from September through Bobcat Day
- Hold more yield events outside our region
- Use our own students to aid recruitment. Use our "Ambassadors Program" and offer UC Merced students an honorarium to go back to their own high schools and community colleges to talk about UC Merced

Out of Classroom Experience:

- > Open UC Merced's Recreation and Wellness Center
- Continue UC Merced's partnership with Millennium Gym
- Begin sports clubs program on campus
- Hire more student life staff to help students organize activities
- Work towards the formation of sororities/fraternities
- Simplify process for students to plan on-campus activities, and make facilities available
- Utilize Lake Yosemite Park

Other ideas for marketing UC Merced

- Create a Visitor's Center to put campus in context
- Revamp the UC Merced website better to reflect UC Merced experience. Also, provide online campus tour reservation system.
- Offer more (targeted) information for high school counselors and parents on the website
- Hold a UC Merced-only Counselor's Weekend

In conclusion, UC Merced recognized the need to revisit the long-standing enrollment projections created for the campus many years ago and replace them with more a realistic enrollment plan, based on current realities and experience.

Revised enrollment plan: UC Merced has negotiated a revised enrollment plan with the UCOP Budget Office. That plan establishes an annual growth expectation of about 675 FTES from FY 2008 through FY 2011, and then at least a 500 FTE annual growth rate thereafter, through FY 2015. This revised plan pushes the breakeven point out two years to FY 2013 instead of FY 2011, thereby extending the timeline for special State supplemental support of the campus. The negotiated plan also changed the timeline for reaching the UC targeted workload ratios (students to faculty), moving up the time when we reach a ratio of 18.7 from FY 2010 to FY2009. This means that the growth in budgeted ladder rank faculty will be somewhat reduced, compared to the original plan.

Topic B.Planning for a Teaching/Learning Center with Leadership in
Campus Assessment Activities

UC Merced has the opportunity to examine other campus' best practices and deliberately to create a Center that will best serve our particular faculty and students. The Provost, staff, and members of the faculty participated in a May 19, 2006 Teaching and Learning Center (TLC) Retreat, with representatives from the teaching centers at UC Davis, UC San Diego, and UC Santa Barbara. After hearing about the services and experiences at those centers, retreat participants offered a variety of thoughts, questions, and suggestions, including the following:

- 1. Assessment practices should be "built-in" to programs at UC Merced from the beginning to create a culture of teaching and learning that is taken for granted.
- 2. The TLC should be mindful of the *diversity* of faculty. The faculty is not one unit with identical interests and methods. Some are not interested in using technology in teaching, for example. This approach might lead to a broader "buy-in" by faculty members.
- 3. How should we measure the achievement of learning outcomes? Not only grades and testing, but also capstone courses, presentations, performances, etc.
- 4. How do we determine that a student is a qualified "UC graduate"? What does a good [English, Chemistry, Engineering, etc.] student look like? What defines a "successful student"?
- 5. What incentives might there be for faculty to advocate/use/participate in the Teaching and Learning Center? Perhaps a Faculty Advisory Board for the TLC?
- 6. Suggested additions to the job description for TLC Director:
 - Component on preparing grant proposals for course and curriculum development
 - More language of teaching in the ad: scholarship of teaching, teaching theory and practice, cross-disciplinarity
- 7. Where should the TLC reside in the UC Merced organizational structure? With General Education? Student Support Services? Academic Personnel? A separate department?
- 8. What qualities are we seeking in a Director?
 - Someone who will be both a Founder and will stay for awhile
 - Vision for the long-term life of the TLC
 - Ability to communicate with faculty and administration
 - Receptive to feedback
 - Exceptional ability to prioritize and use resources wisely
 - Political and financial acuity
 - Well-formed teaching statement/philosophy
 - Alliance-maker
- 9. Are the FTE positions currently allocated for the TLC appropriate? (Director, New Instructor Coordinator, two technical positions). What about course and curriculum consultants? Should there be a group of "Associate Directors" to handle different areas (technology, assessment, etc)? Should we offer course relief to faculty members to work on the TLC?
- 10. The TLC should be an enabler, not a policy-maker or evaluator. It should gather and disseminate information, not make judgments.

11. The Merced Writing Program already gives high priority to assessment and is interested in collaborating on curriculum development. Possibly a natural partner for the TLC?

A copy of the retreat agenda and detailed account of the retreat can be found in Exhibit 3.4-2b. The search for the Founding TLC Director is currently in progress.

Topic C. Steps to Improve UC Merced's Teaching Evaluation System

The WASC Visiting Team requested that UC Merced make improvements in its procedures for evaluation of teaching, including placing a stronger focus on student learning. In brief, the Team commented: "The emphasis currently seems to be more on accountability. However, attention should also be paid to using the process formatively, to assist faculty in improving teaching and learning." The Team asked that the campus revisit its policies and procedures by the time of its October Educational Effectiveness visit.

The recruitment of a Director for the Teaching and Learning Center will bring to the campus a new level of expertise and familiarity with the current literature on effective evaluation of teaching and best practices around the country. The Senate has a stake in the quality of these procedures, owing to the important role that teaching effectiveness plays in faculty personnel processes: recruitment, tenure, promotion, merit, and step advancement. It is anticipated that with the beginning of the Fall 2006 semester, the Senate will form a working group with the Director to refine the teaching evaluation process. In addition, the Senate Draft Policy on Evaluation of Teaching will be revisited in light of this work, revised as necessary, and approved as a formal faculty policy.

Topic D. Progress in Fleshing Out Learning Outcomes and Assessment Plans

In light of the Visiting Team commentary on the initial learning outcomes and assessment plans for each of the majors, faculty in all three Schools re-evaluated their plans (in many cases, reviewing how such plans are formed at other UC and non-UC institutions) and in many instances, clarified and sharpened them. The goal was to improve statements of student learning objectives, determine the best way to assess those objectives, identify ways in which the assessment data can be used to make changes over time, and finally, the best ways to communicate the outcomes to their students. All of the UC Merced programs are planning to post learning outcomes and assessment strategies on their Web sites as a way to improve the communication of expectations to students. Highlights are presented here. The complete report can be found in Exhibit 1.2-2.

Educational Effectiveness Indicators Inventory Table developed using WASC Sample Template 7.1

Category	Formal Learning Outcomes Developed and/or Revised?	Process for Developing/ Revising Outcomes, Assessment & Program Improvement	Method of Communicating Learning Outcomes	Assessment Measures
School of Engin		I		
Bioengineering	Yes	Faculty Lead	 Program Site Course Syllabi 	 Web Student Work Focus Groups Senior Exit Questionnaire Student Teaching and Course Evaluations Alumni Contacts Interaction with Various Extended Constituencies
Computer Science and Engineering	Yes	Faculty Lead	 Program Site Course Syllabi 	
Environmental Engineering	Yes	Faculty Lead	 Program Site Course Syllabi 	Web Student Portfolio Student Perception Survey Web-Based Assessment Instrument
Materials Science and Engineering	Yes	Faculty Lead	 Program Site Course Syllabi 	 Performance in Service Learning Performance in Capstone Design Projects Course Evaluations Teaching Effectiveness Evaluations Exit Questionnaire Student Success after Graduation ABET Review Feedback Student Perception Survey
Mechanical Engineering	Yes	Faculty Lead	 Program Site Course Syllabi 	 Web Student Portfolio Course Evaluation Senior Exit Interviews Yearly Faculty Meetings with Advisory Board
School of Natur	al Sciences			
Applied Mathematical Sciences	Yes	Faculty Lead	 Program Web Site Course Syllabi 	 Student Work Course Evaluations Student Perception Survey Performance in Independent Research, as Assessed by a Variety of Measures Focus Group Interviews of Graduating Students Random Sampling of Graduates

Biological Sciences	Yes	 Reflection Process Questionnaire Retreat 	 Program Web Site Course Syllabi 	for Evaluation of General Education Component Student Success after Graduation Student Work Course Evaluations Student Perception Survey Performance in Independent
Chemical Sciences	Yes	 Reflection Process Questionnaire 	 Program Web Site Course Syllabi 	 Research, as Assessed by a Variety of Measures Student Success after Graduation Student Work Course Evaluations Student Perception Survey Performance in Independent Research, as Assessed by a Variety of Measures
Earth Systems Sciences	Yes	 Faculty Lead 	 Program Web Site Course Syllabi 	 Student Success after Graduation Approval by the American Chemical Society Student Work Course Evaluations Student Perception Survey Performance in Independent Research, as Assessed by a Variety of Measures
Physics	Yes	 Reflection Process Questionnaire Retreat 	 Program Web Site Course Syllabi 	 Student Success after Graduation Student Work Senior Research Thesis Requirement Course Evaluations Student Perception Survey Performance in Independent Research, as Assessed by a Variety of Measures Student Success after Graduation
School of Social S	Sciences, Hum	anities and Arts		
Management	Yes	Faculty Lead	 Program Web Site Course Syllabi Posters 	 Student Work Course Evaluation Student Perception Survey Independent Study Data, as Assessed by a Rubric Random sampling of graduates for evaluation of general education component Graduating & Alumni Survey Focus Group Interviews of Seniors Student Success after Graduation
Social & Cognitive Sciences	Yes	 Faculty Lead 	 Program Web Site Course Syllabi Posters 	 Student Work Course Evaluation Student Perception Survey Independent Study Data, as Assessed by a Rubric Random sampling of graduates

				 for evaluation of general education component Graduating & Alumni Survey Focus Group Interviews of Seniors Student Success after Graduation
World Cultures & History	Yes	Faculty Lead	 Program Web Site Course Syllabi Posters 	 Student Work Course Evaluation Student Perception Survey Independent Study Data, as Assessed by a Rubric Random sampling of graduates for evaluation of general education component Graduating & Alumni Survey Focus Group Interviews of Seniors Student Success after Graduation

One example of revised learning outcomes statement and assessment plan is presented here. The report at Exhibit 1.2-2 contains all updated plans.

Biological Sciences: Learning Outcomes, Assessment & Program Improvement

Description of the Biological Sciences program at UC Merced

The Biological Sciences address many of the most important and fundamental questions about our world: What is life? How does our brain produce our ideas and emotions? What are the limits to human life and physical capabilities? How do we feed the world's growing population? Could medical science ensure that our children won't have to worry about disease? Moreover, there has never been a more exciting and important time to study biology. From the mapping of the genome to understanding the molecular basis of human disease to predicting the effects of global climate change on ecosystems to understanding fundamental processes that produce and sustain life on Earth, the Biological Sciences are at the forefront of finding answers to some of society's most vexing problems.

The undergraduate major in Biological Sciences is an excellent first step towards exciting careers in biology and the health sciences. Graduates of this program will also be well prepared for positions in the biotechnology and pharmaceutical industries, health care, conservation, environmental law and policy and natural resources management (including forest and park services), as well as careers such as journalism, public policy and business, which increasingly involve the biological sciences. In addition, the breadth and rigor of this program will be an excellent preparation for graduates to teach science at the elementary or high school levels.

This program teaches biology as a multidisciplinary science, reflecting the increasing role of chemistry, physics, mathematics, computer science, and advanced technologies in the

life sciences. Students majoring in Biological Sciences can choose between three cores providing background in different areas of biology: Molecular and Cell Biology, Integrative Biology, and Human Biology. These cores consist of a sequence of five or six upper division courses that are taken in the second, third and fourth years of the program. In addition to the core courses, students select an emphasis area involving three thematically linked upper division courses that will give more background in a specific area of biology. Biological Sciences majors also have the opportunity to apply for a Master's Degree program requiring an additional year of study.

Learning Outcomes

Graduates from the Biological Sciences programs will have demonstrated:

- An understanding of major concepts, theoretical principles, and experimental findings in chemistry, mathematics, and physics underlying biology.
- An understanding of the fundamentals of biochemistry and molecular and cell biology.
- An understanding of additional areas of biology that may include genetics and genomics, microbiology/immunology, and/or physiology.
- An understanding of how cellular functions are integrated at the level of the whole organism to sustain life.
- An ability to employ critical thinking and hypothesis-driven methods of scientific inquiry.
- A working knowledge of basic research methodologies, data analysis, and interpretation.
- The ability to formulate significant research questions, design experiments, use appropriate chemical instrumentation, and analyze and interpret data.
- The ability to read, evaluate, interpret, and apply numerical and general scientific information.
- Effective written and oral communication skills, especially the ability to transmit complex technical information in a clear and concise manner.
- The ability to use computers for simulation and computation, data acquisition, and database usage.
- A familiarity with, and application of safety and hygiene regulations and practices in the laboratory.
- An appreciation and understanding of how to apply what is learned in the classroom in a more practical setting outside of the classroom.
- An appreciation of the importance and practice of good ethics.
- An ability to work effectively both individually and in teams in the classroom, laboratory, and everyday living.
- An understanding of the impact of biology in a global/societal context.

Assessment

The following measures will be used to assess the success of the Biological Sciences program in achieving the above objectives:

- Student Work: Quality of exams, reports, and presentations in formal courses. In addition to these more traditional means of assessing student work, some courses include innovative measures such as game quizzes and the development of educational posters to convey research results. An example of this course is one of the Biological Sciences General Education Courses, Core 90, entitled, "Liver Disease & Hepatitis Alphabet." In this course, students communicate scientific knowledge through the use of artwork and posters invoking a sense of aesthetic understanding and creativity while encouraging students to consider science from a unique perspective.
- Course Evaluations: The objectives of each course will be stated clearly in the course syllabus. Students will be asked to give their viewpoint on how successfully each course addressed its objectives. As an example, we administered a detailed survey in BIS 1 asking students about several different aspects of the class. This survey will be administered again in Fall 2006.
- Student Perception Survey: to determine whether students believe that they have achieved the objectives of the Biological Sciences major. This survey will be developed in the Fall of 2006 and administered to students at the end of their sophomore year and upon graduation.
- Biological Sciences majors require at least one unit of undergraduate research and one unit of research seminar. Because research requires that the student make use of concepts and techniques acquired across the curriculum to solve real problems, success at research is an excellent yardstick for the achievement of programmatic goals. Performance in independent research will be assessed by:
 - Standard rubric to be used by all faculty supervising independent research projects. The rubric will map directly to the program outcomes and will be developed in the Fall of 2006;
 - Quality of written research reports;
 - Presentation of results at scientific meetings; and
 - Co-authorship on publications.
- Student Success after Graduation: acceptance to graduate or professional school, or employment in a field that makes use of the student's education. Efforts will be made to track all graduates annually for at least several years after graduation.

Program Improvement Mechanisms

The assessment data will be analyzed to identify strengths and weaknesses of the existing program and to insure that the curriculum remains flexible enough to keep up with changes in the discipline. A number of modifications may be considered:

- Formative evaluation. We carefully compare the success of students on our exams and assignments from semester to see if changes to our teaching approach are working.
- Revisions in the content or pedagogy of existing life sciences courses. This
 particularly includes laboratory exercises, which tend to become outdated quickly.
- Changes in prerequisites, both within and outside the biological sciences.
- Elimination of courses that may have outlived their usefulness, or combination of two or more courses into one.

 Addition of new courses in response to evolving new directions in biology, changes in the relative importance of subdisciplines, or the addition of new faculty with new expertise.

Addition of new emphasis tracks in response to new directions in biology or the addition of new faculty with new expertise.

The Visiting Team also commented on the preliminary nature of assessment planning for general education. Planning has continued and is reported in detail in Exhibit 4.6-1. Updated assessment plans are charted below.

GE	Assessment Strategy	Status of Development and/or
Assessment Component		Implementation
General Education Curriculum	 The general education curriculum can be seen as three paths, depending upon which school the student belongs to. It is important for us to ensure that students, regardless of school, obtain the skills necessary for a general education. The assessment of the general education curriculum is going to involve three strategies: Course evaluations (these will be the standard course evaluations offered in every course); A general education survey (any course approved as a general education course will be required to administer a brief survey at the end that is intended to directly assess outcomes related to the guiding principles); and General education self studies (these self-studies will entail faculty working with the Director of the Teaching and Learning Center to assess the effectiveness of their general education course; the self-study will examine the learning outcomes, assessment measures, and a plan of action for improving the course will be instituted. Although intended as a quality assurance process, much data will be collected in the process that will contribute to the assessment of general education) 	A standardized course evaluation is already under development. The general education survey will be developed by the end of Fall semester. Although all of the general education courses would not have undergone the course approval process by that time, it will be the goal that the general education survey be implemented in every GE course anyway as a means for establishing some baseline information about the general education courses. The general education self-studies are a longer-term goal and will require the support of the new Director of the Teaching and Learning Center both with respect to specific design of the self-study evaluation process but also with respect to implementation.
Major Curriculum	In preparation for this report, all of the majors instituted a comprehensive revision of their major learning outcomes and assessment measures. The assessment measures provided for each of the majors will provide the data necessary to assess what general education outcomes are being achieved through the majors. A sampling of specific assessment strategies includes: • Faculty Assessment of Student Work	An Outcomes Mapping has been completed. This is the first step in connecting the learning outcomes from each major to the guiding principles. Once objective-assessment mappings have been completed for each major, we intend to further refine the Outcomes Mapping to reflect how each major objective is being assessed which will provide the necessary
	 Faculty Assessment of Student Work Course Evaluations Student Perception Survey 	information from which to identify specific strategies being used for each

	Focus Group Interviews of Graduating	guiding principle.
	Students	Serang principie.
	 Random Sampling of Graduates for 	
	Evaluation of General Education	
	Component Alumni Survey	
Core 1 &	 Alumni Survey Core 1 and Core 100 have developed 	Much work has been done with Core
Core 100	comprehensive assessment plans. The section in	1 and 100 over the last semester. An
	this report that discusses the Core Course	instructional consistency and
	Sequence provides detailed information in this	congruency analysis was done for
	regard. The assessment strategies utilized that	each course to determine the
	will provide information to the general	objectives of each course, its
	education assessment include: Core 1:	connection to the guiding principles, and the assessment measures used. As
	 Student performance on quantitative 	a result of this and significant work on
	assignments, essay assignments, and the	the part of the faculty in making
	cumulative writing assignment. Rubrics are	revisions, both courses have adopted
	being developed for the assessment of these	new statements of learning objectives
	and data from these will be used for general	that are derived directly from the
	education assessment.	guiding principles. The mid-semester
	Reflective student journalMid-semester and final course evaluation	and final course reviews were developed in the previous semester
	- Who-semester and final course evaluation	and implemented. With the revision
	Core 100:	of the learning outcomes, the surveys
	 Reflective student journal 	were updated to reflect the mapping
	 Data from Rubrics used to assess team 	to the guiding principles. This will
	report and presentation	make it much easier to pull data from
	 Mid-semester and final course evaluation 	the surveys next semester as documentation for general education
	Because Core 1 sets a baseline to which Core	assessment.
	100 later responds, the use and integration of	
	assessment data from these courses is a critical	
	component to our overall plan.	
Special	This component includes such things as service	With respect to service learning, the
Academic	learning and freshman seminars. Specific	objectives have been mapped to the
Programs	assessment strategies have been developed for such programs and data from these will be used	guiding principles and a similar process of mapping the assessment
	to assess the guiding principles. Such	measures to them must be completed.
	assessment strategies from service learning	There is already strong coordination
	include:	between general education and the
	 Pre and Post surveys 	service learning program and Fall
	 Data from peer evaluation rubrics Additional coordination with the Encoderer 	semester will include further
	Additional coordination with the Freshman Seminar program will be undertaken this year to	solidification of what assessment data will be most useful to the assessment
	ascertain which assessment strategies will	of general education. With respect to
	provide data necessary for GE assessment.	other programs, similar connections
		need to be made.
Independent	Several of the majors made a commitment to the	As indicated, several of the majors
Study	use of rubrics in the assessment of independent	included the use of rubrics to assess
	study, which includes undergraduate research	such independent study work when
	experiences and internships. For example, all of	they made revisions to the major
	the natural sciences majors have decided to include a rubric in the assessment of student	learning outcomes and assessment measures. In the Fall, implementation
	independent research projects and the World	of this will begin through the
	Cultures & History major is going to use a	development of a template rubric that
	similar rubric to assess student performance in	can then be adapted for each major

the WCH internship, the Proseminar, and the senior thesis requirement. The consistent	and their intended purposes. A specific section of each rubric will
adoption of rubrics amongst faculty for the	include assessment specific to the
assessment of such independent study	determination of major learning
experiences is of significant benefit. Not only	outcomes and the guiding principles.
will student performance be consistently	
assessed but data from the rubrics will	
contribute directly to general education	
assessment because it provides concrete data	
regarding an individual student's work.	

Topic E.Sustaining Student Success Interventions and ProvidingSeamless Student Advising

<u>Student Advising and Learning Center: Sustaining Student Success Activities,</u> <u>including Mid-Semester Grades and Student Success Workshops</u>

Student Success Workshops, which require attendance and full participation of all freshmen with one or more grades of D+ or lower at mid-semester, have provided UC Merced with an enormous amount of student feedback regarding their own difficulties and learning needs, as well as their reactions to the workshop overall. The spring semester workshops were designed in response to the trends in student responses regarding their struggles in the fall.

All freshmen with at least one D or F (approximately 400 reported)	Freshmen who finished below 1.5			
I do not feel motivated to succeed				
.8%	17%			
Family pressures				
19%	31%			
I skip classes				
29%	46%			
Too many commitments				
12%	28%			
I have good intentions but do not follow through				
41%	68%			
Lack of confidence in my abilities				
11%	27%			
I have not learned to control the stress that college brings into my life				
24%	61%			
(Freshmen who finished below 1.5, who indicated one or more of the following: 89%				

(Freshmen who finished below 1.5, who indicated one or more of the following: 89% I have not learned to control the stress that college brings into my life; I have good intentions but do not follow through; lack of confidence in my abilities; I do not feel motivated to succeed).

The themes of lack of motivation, lack of confidence in abilities, inability to manage stress in college, and "good intentions" with lack of follow-through, which constellated among the most at-risk students, shaped the content of the spring workshops.

Descriptions follow of the Student Success processes, the data collected, and methods by which the data were applied to development of further workshops.

<u>Fall Success Workshops</u>: In total, 343 students participated in the hour-long fall sessions. Workshops were offered in 9 different sessions in the fall, at different times to facilitate attendance by all who needed to be present. These sessions involved self-assessment, small-group discussion, composition of success plans (kept by each student), and then an evaluation of the workshop. Group discussions were facilitated by academic advisors, professional counselors from the Counseling Center, and other student affairs staff members.

As the evaluation results show, the upbeat and encouraging atmosphere at the workshops made an impact upon the students. The most specific, constructive student feedback centered on their desire for learning tips, such as time management or other study skills, and information regarding UC Merced policies relevant to academic performance.

Application of Data Provided at Fall Success Workshops and Mid-Semester Grades: One of the most immediate responses made on the part of the Student Advising and Learning Center was to schedule a series of workshops on time management, note-taking skills, motivation, test anxiety, and test-taking during the weeks that remained in the fall semester. These workshops had already been offered, but it was clear that such opportunities had not captured the interest of most students until after they had a chance to discover which areas they needed to improve. Attendance at the post-success workshops was not mandatory, and numbers fluctuated from 6 to 30 at each event. Academic advisors played an instrumental role in encouraging their students to take advantage of these opportunities.

Furthermore, feedback from students about the workshop experience affirmed that they were accepting and appreciative, and perhaps even demanding, of hand-holding and personalized encouragement. After final grades were issued, the 76 students who successfully appealed their academic dismissals were placed on contract agreements to meet regularly with advisors, to attend tutoring and at least 3 skills workshops during the spring.

The positive feedback from students with regard to the production of a success plan, the chance to "talk about" their difficulties with peers or a professional, and the renewal of hope to succeed had a wide-ranging impact on campus. It shaped the future development of the workshops, and also reached inside the classroom to affect courses in progress. Readjustment of expectations and adoption of renewed ambitions were not limited to students only. For example, mid-semester grades in the fall showed disproportionate numbers of F and D grades in pre-calculus and introduction to economics courses. The relevant School Deans immediately met with the instructors of these courses to discuss the addition of more frequent, smaller exams, adoption of mastery-type teaching and learning methods, and heavier weighting of end-of-semester assignments and exams, in order to give weaker students a chance to strive to bring their grades up. This responsiveness at the instructional level further impressed freshmen with UC Merced's dedication to their success. <u>Spring Success Workshops</u>: In light of the most commonly self-reported weaknesses of students in the fall semester, the spring workshops were built around the theme of motivation. Prevailing obstacles reported in the fall such as "easily distracted by friends" (164 students), not having utilized faculty office hours (194), good intentions without follow-through (157) and skipping classes (108) showed that drive and self-discipline lay at the heart of many learners' difficulties. When compared to other items on the survey, such as the course load being too heavy to succeed (34) or lack of academic preparation for the courses (23), it became clear that the spring workshops needed to ignite a fighting spirit in the freshmen with low grades.

Application of Data Provided by Students at Spring Success Workshops to 2006-2007 Planning: The most immediate responses made by the Student Advising and Learning Center were to expand tutoring opportunities (1212 hours of tutoring were used by students) and to schedule a series of workshops on time management. In some respects, the participants' comments on the evaluation of the spring sessions demonstrate their subtle gain in maturity since the fall. The suggestions to have "A students" speak before the group will be implemented in the fall of 2006. Some of the contributors suggested having faculty involvement, which is a prospect that will be explored for the coming year. The relatively frequent proposal to teach academic skills rather than give a generalized talk also holds promise. In fact, formal workshops in the field of pre-calculus, led by a student staff member of the Student Advising and Learning Center, had already been implemented in collaboration with the School of Natural Sciences during the spring.

Feedback from students on their self-assessments, which showed 232 out of 280 stating "procrastination," and 73 stating online activities or Myspace.com as their escape routes from learning, will be bringing changes to how students are introduced to college life for future freshmen. With more than 200 combined responses related to "boring" material, laziness, lack of motivation, and underestimation on students' part of the time needed to complete academic tasks, New Student Orientation has been restructured to address these issues. In the summer of 2006 student panelists will be speaking to the incoming freshmen about the differences between high school and college. Some will be able to relate their own stories of missteps in their first year. Also, the first student session of each orientation event will be led by the Director of the Student Advising and Learning Center, and it will pose a review of what UC Merced learned about the pitfalls of freshman life, and how to define and sustain motivation and self-discipline from the beginning.

With a somewhat smaller incoming freshman class than in Fall 2006, the current program is sustainable and continued experience will support planning for long-term sustainability. See Exhibit 4.6-2c for the detailed report, including forms, instructions, and responses.

<u>Overview of Academic Advising at UC Merced: Assuring a Seamless Student</u> <u>Experience with Advising</u>

Each of the three Schools has one full-time academic advisor to serve the students in the respective unit. These advisors provide guidance to the students enrolled in their School's majors, in addition to those who remain "undecided" with regard to their specific choice of major, yet they have a general focus related to the School that they have selected as their home. Students who have chosen no specialty or general area are overseen by the Student Advising and Learning Center (SALC), where a full-time academic advisor works with them exclusively. Advising in the SALC aims to help students take steps to find their specialty and declare it by the end of their sophomore year; SALC does not advise students at the junior level and beyond. Thus, SALC bridges academic and student services. Students are served by the following structure:

School of Social Sciences, Humanities and Arts (SSHA)	School of Natural Sciences (NS)	School of Engineering (ENG)	Student Advising and Learning Center (SALC)		
Dean of SSHA	Dean of NS	Dean of ENG	Vice Chancellor for Student Affairs		
Assistant Dean of SSHA	Assistant Dean of NS	Assistant Dean of ENG	Director of the SALC		
	Director of the SALC				
Academic Advisor for SSHA	Academic Advisor for NS	Academic Advisor for ENG	Academic Advisor for SALC		
Students in the SSHA majors and emphases	Students in the NS majors and emphases	Students in the ENG majors and emphases	Students who have yet to choose a specialty area		

The matrix above aims to demonstrate that upon entry and throughout their career at UC Merced, students identify their academic advisor with ease, based on their chosen field of study. The Director of the SALC leads all efforts that unify the advising process with regard to timelines, policy review, revision and campus-wide implementation, new student services such as orientation planning, and general communications.

Each academic advisor is employed within his or her respective School or the SALC. School advisors are supervised by their Assistant Deans; the SALC advisor is supervised by the SALC Director. The Assistant Deans of the Schools and the SALC Director collaborate in hiring processes of academic advisors, and in the scheduling of many other processes that involve advisors' participation. These include New Student Orientation planning and professional development activities of the advisors. The School advisors do not report formally to the SALC Director. However, they are supported by their Schools in their role as members of a campus-wide advising team. Participation in weekly advising meetings and other activities led by the SALC Director that demand the contribution of perspectives from across campus are built into the expectations set by the Assistant Deans. Results from our Spring 2006 National Survey of the Student Experience indicate that 69% of freshmen and 71% of transfer students rated academic advising as good or excellent.

<u>Ensuring Seamlessness of the Student Advising Experience</u>: Beginning with New Student Orientation, which is planned with all academic advisors, students are introduced to the advising process through the advisor to whom they have been assigned. Because all Schools adhere to the same course placement exam standards, transcript deadlines, and

academic standards (such as academic probation, dismissal, and in the future, Dean's List standing), students are able to change their mind about their major and seek guidance from any advisor at any time, before or after they officially change their major. In fact, advisors encourage their advisees to meet with advisors in other Schools whenever they feel the need to explore a different major. Through weekly meetings and other communications, advisors actively communicate to share advising records with one another when students move from one field of study to another.

The review process for students who are subject to academic dismissal also represents a unified effort across the Schools and the SALC, to ensure that students' best interests remain at the center of these processes. After final grades are issued each semester, it is up to the School advisors along with their Dean or Assistant Dean, and the SALC in collaboration with College One, to decide which student appeals to honor, and how to proceed. The SALC Director coordinates a meeting each semester with all advisors, Assistant Deans, the Registrar, and the Vice Chancellor for Student Affairs to develop a framework from which all areas can work. Each unit has set its own criteria for approving dismissal appeals, but all work from the same baseline of standards, the same timeline, and the same procedure of meeting with the students.

All student submissions of requests for appeals are received in the SALC, and they are recorded and then distributed to the Schools. Through the communication among advisors, all areas have agreed to have their dismissal students reviewed in whatever area houses the program where a particular student's interests lie; this demands much coordination for the record-keeping and tracking of crossover students. In these respects, the SALC serves as a headquarters for the academic dismissal appeal process, but the different units retain their autonomy when facing program-specific issues affecting their students. The complete report on the organization of advising and connections among advising staff can be found in Exhibit 2.5-2b.

Topic F. Engaging External Stakeholders in UC Merced Planning

UC Merced has a number of forums in which it engages external stakeholders in UC Merced planning. Three brief examples are cited here: the affiliation with the Great Valley Center, the UC Merced Foundation Board of Trustees, and the preliminary planning for a future medical education program.

<u>The Great Valley Center</u> is a well respected organization that has served the Central Valley since 1997, providing a regional focus on Valley issues from Redding to Bakersfield. Their purpose is "to support activities and organizations that promote the economic, social, and environmental well-being of California's Great Central Valley." By affiliation with UC Merced, the Great Valley Center will support the campus research, teaching, and service mission while continuing to remain a separate corporation. The President of The Great Valley Center reports directly to the Chancellor of UC Merced and serves as Special Assistant to the Chancellor, managing the Great Valley Center's activities as well as providing counsel and assistance to the Chancellor on UC Merced's highest priorities.

<u>The UC Merced Foundation Board of Trustees</u> held its first meeting in March of 2000 with the expressed purpose "to raise and administer private gifts and grants to assist in the promotion and financial support of the teaching, research, and public service activities of the University of California, Merced, and as determined by the Chancellor of the University of California, Merced. "The Board is composed of approximately sixty prominent corporate and professional leaders from the Valley and across California.

UC Merced has initiated planning to establish <u>a UC Merced Medical Education</u> <u>Program</u> to address the disproportionate physician shortage in the Valley, with a particular emphasis on training physicians who are competent in multi-cultural health care and who are committed to serving the needs of the San Joaquin Valley. The proposed medical education program is based on academic partnerships and utilizes existing resources in the Valley and sister UC campuses. Within a two-month span beginning in March 2006, UC Merced and UCSF Fresno leadership held six community forums from Bakersfield to Stockton to explain the regional medical education model and promote support for its development. Forum attendees were invited to become part of a UC Merced Medical Alliance for the Valley. Attendees demonstrated their enthusiasm for the Plan by committing to write letters, sign petitions, and enlist other community supporters. The support across the Valley is enormous and includes the Presidents of the Valley's three CSU campuses and Valley legislators, among many others.

Topic G.How Will Educational Effectiveness Be Sustained in Campus
Planning?--Collecting, Analyzing, and Applying Data to
Support Continuous Improvement

<u>Planning</u>: Data, along with the analysis and interpretation of data, support institutional tactical and strategic planning in important ways. Data provide the foundation for decision support and institutional effectiveness, but they are not sufficient. The power of data in a planning environment comes from integration of data across areas (e.g., academic, budget, facilities, personnel), the ability to consider alternative scenarios, as well as from the communication and interpretation of the data. Interpretation and communication of the data are essential to ensure that the information is used to evaluate and support decision making. This is important at all institutions, but it is particularly important at a start-up campus like UC Merced.

The Office of Institutional Planning and Analysis (IPA), housed in Academic Affairs, is part of a nucleus of campus administrators with planning responsibilities. Other important players include the Budget Office, Capital Planning, Admissions, Registration, Facilities, and the Faculty Senate Committee on Academic Planning and Resource Allocation (CAPRA). Coordination of the various data and reporting systems represented by these planning areas supports decision-making at the highest levels of campus management (Chancellor, Vice Chancellors, Deans, and Faculty Senate Executives). Next steps in improving the planning process at UC Merced involve institutionalizing the responsibilities of the planning working group as well as developing the infrastructure necessary to better support campus planning.

Although UC Merced is in the process of setting up the planning infrastructure, at the same time, we are pulling together information from various sources so that we can

address key questions and resource issues. The lack of a mature reporting infrastructure is a major challenge to the effectiveness of the planning efforts at this time. Some examples of these efforts include analyses of:

- admissions and financial aid, in the context of meeting enrollment targets and projections (logistic regressions showing the likelihood of admitted students enrolling, depending on student characteristics, financial aid offers, etc.) impact of enrollment shortfalls on resource allocations (how do various enrollment projection scenarios affect the campus' timeline to reach a break-even point?)
- impact of enrollment shortfalls on the timeline for additional housing and other capital projects, such as the Science/Engineering Building 2
- student course enrollments and faculty workload to project allocation of future faculty resources, by program
- mid-term and final grades by course and program, as well as student characteristics
- first semester undergraduate survey, dealing with students' reasons for attending UC Merced, their perceptions of their skill levels, satisfaction with various services and experiences at UC Merced
- feedback on academic success of community college transfers
- feedback on academic success of Early Academic Preparation (EAP) program participants who enrolled at UC Merced
- Spring 2006 undergraduate surveys (National Survey of Student Engagement and the University of California Undergraduate Experience Survey), benchmarking the academic and co-curricular experiences of UC Merced students with other institutions within the UC System and nationally, and FY 2006 Graduate Student Survey, providing feedback on the quality of the graduate program and student satisfaction with various aspects of their graduate program.

See Exhibit 4.5-2 for a detailed report, including examples of admissions and student performance analyses and feedback to community college and Early Academic Preparation programs. See also Exhibit 4.5-3 for a report from UC Merced's Center for Educational Partnerships on the analytical services provided by the Center to Valley schools to help them understand better performance of their students on statewide examinations. This Educational Effectiveness Report includes examples throughout of ways in which data are being collected, analyzed, and applied to on-going program and service improvement.

<u>Reporting Infrastructure</u>: IPA¹ devoted a significant part of this past year (FY2006) to evaluating the campus' data and reporting systems. UC Merced uses SCT-Banner for its student information system (Admissions, Registrations, Financial Aid) and a "homegrown" Payroll/Personnel system that was developed and is maintained by UCLA. Other systems have been developed or purchased to meet other needs as they have been identified. For instance, UC Merced uses an open-source course-management system (Sakai) and a locally-developed personnel recruitment system (PAWS). Capital Planning

¹ The Office of Institutional Planning & Analysis was established in July 2005, with the hiring of a Director. In November 2005, two additional staff members were hired: a Principal Research Analyst and an Institutional Research Systems Manager.

purchased a system developed at UC San Diego which, in addition to supporting the needs of capital projects, also has the potential to incorporate the data collection and reporting needs of Physical Plant, Facilities, and Construction Design. The campus has the opportunity to acquire a faculty workload module from UC Davis. This module interfaces with the SCT-Banner student information system (SIS) and the Payroll/Personnel data at UCOP. It is used to report faculty workload by school and program for internal resource-allocation decisions as well as for compliance reporting to UCOP and the Legislature. Other administrative systems needs have been identified and will be addressed over time.

In January, 2006, the Provost charged the Chief Information Officer (CIO) (with the assistance of the Director for Institutional Planning & Analysis) with the task of recommending a plan for the development of a campus data warehouse (DW). The goals of the DW would be to support decision-making, planning, and accountability. The DW would be a central, standardized data repository, separate from the production systems, and would facilitate integration of data and expand access to information. The data would be in a format that would make it more easily reportable and understandable. The CIO and Director, IPA met with a series of small groups, representing a cross-section of major decision-makers and data users on campus over the span of about two months. This process revealed overlapping needs for a wide array of data or information, as well as common desires to have integrated and user-friendly access to the information. (See Exhibit 4.5-2.) It also revealed the need for various new production systems.

As the campus deliberates and plans a formal DW initiative, IPA has begun designing a reporting infrastructure to support the office's reporting and planning needs. Snapshots of SIS, as well as Payroll/Personnel, have been stored on a secure server apart from the production systems. The data and data structures are being transformed for easier reporting. This short-term strategy to improve reporting and analysis capabilities complements and jumpstarts the longer-term strategy to design and implement a campus-wide DW.

Topic H. Pause to Reflect on Experience to Date

UC Merced's faculty, administration, and staff have found value in not just one retreat to reflect on the first year's experience and plan for the future; they have organized a number of retreats. Among them have been the Enrollment Summit, reported in Topic A above; the Teaching/Learning Center retreat, reported in Topic B above; Core Course Sequence and Writing Program retreats; and a Student Affairs retreat. An end-of-summer retreat is currently being planned, with a special focus on general education and a draft strategic plan for College One and undergraduate education. The outcomes from that retreat will be highlighted during the Visiting Team return at the end of October.

<u>Part III. Initial Results Signifying that a Culture of Evidence and Continuous</u> <u>**Improvement Is Developing at UC Merced**</u>

During the first year, UC Merced's student body was dominated by a large freshman class, with much smaller transfer and graduate student classes. The particular focus of first year assessment activities and continuous improvement were programs in which

freshmen were especially involved: the experimental Core Course Sequence and Engineering Service Learning program, the UC Merced Writing Program, and the range of services provided by Student Affairs. Student views were frequently solicited, both their responses to the specific experimental courses in which they were participating and their global assessment of their experiences as pioneers at a fledgling research university. While graduate education is developing at a slower rate, the conversion of emphasis areas with an Individual Graduate Program into stand-alone graduate programs has allowed some initial assessment and mid-course corrections among the new graduate programs as well. Part III of this Report lays out the assessment approaches used, initial results, and corrections made as a result of analysis of student surveys and student work.

Topic A.Experimental Curricular Programming: Applying Learning
Outcomes, Assessment, and Revision to the Core Course
Sequence and Service Learning Program

1. Core Course Sequence

The Core Course Sequence was described in some detail in the Preparatory Review Report. Core 1 is required of all freshmen and Core 100 of all juniors. It is intended to fulfill all the Guiding Principles for General Education established by the faculty. As a highly experimental course, on-going assessment and mid-course corrections have been essential in order for the Sequence to achieve its educational goals. Exhibit 4.6-4 gives a detailed report on the courses, assessment plans and approaches, results, and uses made of those results. The excerpts below focus on assessment outcomes and uses made of them.

Core 1 Assessment

Consistent with promoting a diverse set of learning objectives and as the hallmark of general education at UC Merced, students are assessed using a variety of methods. However, given the culture of continuous improvement in Core 1, faculty members are also provided an opportunity for assessment through a peer-review teaching evaluation. The table below describes the updated assessment strategy for Core 1. Although some strategies have certainly remained, the 2005-06 year provided the Core 1 faculty with much information on how better to structure the course to achieve the desired learning outcomes. In the Core 1 Course Improvement Process section below, the continuous improvement efforts will be described along with an overview of changes made to Core 1 throughout the year.

Category	Strategy	Description
Course	Quantitative Assignments	Sample quantitative assignments include such tasks as determining the mass and age of planets and black holes; the probability and rate of mutation of genetic traits associated with AIDS; the melting points of various metals and trade relationships between countries that produce
		them; etc.

Assessment Strategy for Core 1: Fall 2006

	Б	
	Essay	The essay assignments ask students to respond to two modules at a time.
	Assignments	This cumulative approach to course material is designed to forge
		connections between lectures, discussion sections, readings, and
		disciplines. Among the topics on which students wrote were the ways in
		which we've learned to imagine the universe over time; the history and
		ethics of UC government-sponsored research; the ethics and practicalities
		of water use and conservation along the US-Mexico border; etc.
	Cumulative	The cumulative writing assignment is an integrative essay that will ask
	Writing	students to address a common theme or thread in the course. This
	Assignment	assignment draws on lectures, readings, and core texts to explore themes,
		and amounts to 8 pages. The goal of the smaller writing assignments and
		discussions is to prepare students for this longer project.
	Reflective	The journal is intended to encourage student and freedom of expression.
	Journal	Some faculty members offer this as an opportunity for free association,
		while others provide specific prompts to help students develop ideas in
		certain areas.
	In-Class	In-Class writing assignments provide an opportunity for students to
	Writing	develop quick critical analysis skills and communicate their thoughts in a
	Assignments	timed writing period.
	CORE Friday	A CORE Friday event is held each week. These events include films,
		documentaries, distinguished speakers, discussion panels, and staged
		productions.
Surveys	Mid-Semester	This survey attempts to collect valuable formative evaluation data from
-	Course Review	students on a variety of issues related to the course, including: interest in
		the course, understanding of general education, course involvement, clarity
		of assignments, instructor and student perception about how Core 1 has
		improved their skills in relation to the course objectives.
	Final Course	This is the same survey given at mid-semester. The only difference is the
	Review	addition of some different qualitative comment questions.
Faculty	Peer-Review	Using a peer teaching evaluation procedures developed by the UC Merced
	Teaching	Writing Program, faculty members in Core 1 have found the process useful
	Evaluation	in evaluating their own teaching practices. Using this procedure, a faculty
		member is provided with a pre-observation form in which they indicate
		responses to a range of questions include what the learning objectives are
		for that day of teaching, the lesson plan, and any other issues. The goal is
		to further use of this peer review evaluation process.
	1	l se

Core 1 Course Improvement From Fall 2005 to Spring 2006

The Core 1 faculty spent a significant amount of time between Fall and Spring in an attempt to improve Core 1. The Faculty worked in module teams in order to tailor assignments and readings to the goals of lectures. These teams would write the quantitative and essay assignments, as well as answer any questions about the materials during faculty meetings. The following table summarizes their dedicated efforts in improving the course for the Spring 2006 offering:

Problems & Solutions: Fall 2005 to Spring 2006

Problems Identified from Fall 2005 Core 1 Offering	Solutions Implemented in Spring 2006 Core 1 Offering
• Pacing of materials	 Reduced and focused reading materials. Biweekly quizzes to maintain lecture attendance as well as track content knowledge. Revision of quantitative and essay assignments more directly to connect

	them to readings and lectures as a means to offer better synthesis of materials.	
Connections between modules	 Weekly essay assignments were revised to cover two modules, which allowed students to formulate responses that would integrate lectures, modules, and disciplines. Enhanced focus on the cumulative writing assignment as a means to help students keep a big picture understanding of course and connections between topics. Revision of quantitative and essay assignments to more directly connect them to readings and lectures as a means to offer better synthesis of materials. 	
Lack of assessment data from students	 Developed and implemented mid-semester and final course evaluation survey to gather student perceptions about the course. Implemented collaborative peer teaching evaluation process. 	

Core 1 Course Improvement From Spring 2006 to Fall 2006

With the addition of several new assessment strategies, faculty had much more data to work with when they turned to revising the course for the upcoming Fall 2006 offering. The table below summarizes the Core 1 faculty efforts in identifying problems from the Spring offering and identifying solutions that will be implemented for the Fall 2006 offering:

Problems Identified from Spring 2006 Core 1 Offering	Solutions to be Implemented for Fall 2006 Core 1 Offering	
 Need better integration of course content (i.e., link between course modules) Need more cumulative and integrative assignments 	 Module structure will remain similar, despite changes in lecturers; however, the module descriptions will be revised to match course content more closely, and additional context will be added to the assignments to guide students in drawing the connections between modules. The "Shifting the Origin of the Universe" lecture will be shifted to the beginning of Module 1 to set up the lectures and pace the course better. Will give more depth to the quantitative assignments and allow more focus. Quantitative assignment will "set up" the writing assignment, and module teams will write each set of questions so that the essay applies the quantitative project. This way that math carries over into the writing, and it has more application and allows students to make better connections. 	
• Students need more guidance on course assignments, grading procedures-better comm. of expectations	 Additional rubrics that are tied to learning outcomes will be developed as guides for students in the development of their assignments. A more formal set of learning objectives were developed and will be included on the Fall 2006 syllabus. 	
 Need to revise and/or shorten the reading list Reading list needs to be more tailored to the course content to help students make connections 	 A reading list has been circulated and faculty will determine which readings are recommended and which are required. The reading list will be tailored such that the readings will address the module theme, but not necessarily the lecture topics. Based on the feedback, the breakdown should be around 10 pages of critical reading and 20 pages of reference material. 	
• Something needs to	• One of the Skills Sessions will include technology as a topic.	

Problems & Solutions: Spring 2006 to Fall 2006

	address the role of technology in students' everyday lives.		
•	Grading of individual assignments is too coarse grained. A larger grade scale is needed to help motivate student performance	•	The grading scale will be increased to provide more flexibility in grading for faculty and increased motivation for students. Core 1 faculty wanted to avoid students working really hard on an assignment that is only worth 5 points. The new grading scale will attempt to alleviate some of this problem.

Core 1 Results: Quantitative & Qualitative Student Feedback

In addition to informal feedback received by Core 1 faculty, data were collected via a Final Course Review. Below is a summary of the key data results from the Final Course Review. The total number of students who completed this survey was 382.

- 11% of students indicated a high interest in taking Core 1 at the beginning of the semester, compared to 27% of students who indicated a high interest in taking the course at the end.*
- After completing Core 1, 44% of students indicated a high degree of understanding regarding general education compared to 19% who indicated a low degree of understanding.
- 54% of students spent 1-2 hours on quantitative assignments and 47% of students spent 3-4 hours on essay assignments.
- 67% of students found the written and verbal instructions for the written assignments clear.
- 73% of students found the written and verbal instructions for the in-class activities clear.
- 52% of students indicated that there are always clear connections between the discussion section and lectures.
- Overall, students found that Core 1 provided information and support in developing skills. When asked to rank the extent to which Core 1 helped students achieve a list of skills, students indicated their responses on a scale from A(Not at all) to E(Very Well). Most notably, Core 1 helped students develop in the following areas:
 - Thinking creatively: 42% (Very Well) compared to 22% (Not at all)
 - Solving intellectual problems: 41% (Very Well) compared to 23% (Not at all)
 - Developing interdisciplinary perspectives: 45% (Very Well) compared to 22% (Not at all)
 - Understanding the value of different perspectives: 53% (Very Well) compared to 17% (Not at all)

*Note: Unless otherwise indicated, the survey results were based on a five-point scale. The middle data point was considered neutral. Points 1 and 2 were collapsed to represent the "low" end of the scale and points 4 and 5 were collapsed to represent the "high" end of the scale.

**Note: The five point scale on these two questions were broken down into hours, A (less than 1 hour), B(1-2 hrs), etc.

Qualitative data was also collected on the final course evaluation. A thematic summary of responses is provided in the table below.

Core 100 Course Improvements Made During First Offering

Given that much of the course improvements were made "during" the first offer, the faculty first put together a plan of action that would enable to solidify the goals and methods of assessment for Core 100. The assessment plan developed was as follows and the progress to date on each is indicated in the status box:

Core 100 Assessment Plan

Step	Assessment Task	Status
1	Identify outcomes for course.	Completed
2	Structure course content to map to outcomes.	Completed
3	Explicitly identify components of the course that map to the outcomes.	Completed
4	Evaluate student products to see if the outcomes have been achieved.	Completed
5	Evaluate the effectiveness of the course in delivering the outcomes by administering a survey	Completed
	to students at the end of the class.	
6	Identify an external advisory group to rate how well Core 100 is meeting the stated objectives,	In
	and set a review schedule. Reviewers need materials such as the stated outcomes, map	Progress
	between outcomes and course content, samples of the range of student work, grading matrices	
	for assignments, and student course evaluations.	

As seen above, the Core 100 faculty members have completed steps 1-5. In addition to further defining how Core 100 meets the general education principles, the faculty worked together to develop an evaluation matrix rubric for consistent grading of the final report and presentation. A mid-semester and final course review was developed based on the survey given for Core 1. A rubric was also developed for peer evaluation of students. The Core 100 Peer Evaluation Scoring Form can be found in Exhibit 4.6-4.

Core 100 Course Improvements Identified for Next Offering

Through the process of developing the materials during the first offering, much was learned about what worked and did not work and changes could be made in real-time. This was valuable in closing any gaps and improving the course. However, the Core 100 faculty are also looking ahead to the next offering and have identified problems found in this offering of the course and recommended solutions for moving forward. These are provided in the table below:

Problems Identified from Spring 2006 Core 100 Offering	Solutions to be Implemented for Spring 2007 Core 100 Offering
 Course was team-taught, but message from individual faculty was not always consistent Lack of course 	 Need to establish better communication mechanisms amongst the responsible faculty and writing instructors. Reconsider lecture content and sequence of lecture/discussion topics. Consider compacting the "how to" and putting them after an

Problems & Solutions: Spring 2006 to Spring 2007

•	organization Gaps in course material that would have been useful	 introductory lecture about the expectations and rules of the game, which would be followed by having the examples from the outside people before the students choose topics. Need to include at least one lecture on teamwork and management, led by someone who is a manager in a business. Indeed, no single issue was more difficult for the students than that of dealing with one another. Dealing with power conflicts, irresponsible teammates, personality issues, etc.
•	Lack of guidelines regarding how students should choose problems Lack of guidance about expectations	 Develop guidelines that will guide students through problem selection. Develop more rubrics to help communicate expectations to students. Perhaps past team leads could co-present with past faculty early on, orienting students about what needs to be accomplished and pitfalls. Formal grading apparatus needs to be developed.
•	Resentment of teamwork- based grading	 Need to develop thorough rubrics that help students to understand team and individual expectations and help to alleviate anxieties. Opportunities for faculty to learn more about project-based learning need to be provided-Teaching & Learning Center will be a resource. Need to have a better system for recognizing individual contribution.
•	No formal process for assigning students to teams	• Pre-assigned teams may make more sense in order to ensure maximal disciplinary diversity, create a more realistic work environment, and minimize social distractions.
•	Implementation of peer evaluation process was awkward	• Implement online peer evaluation system.
•	Journals were not initially monitored and many students waited until the end to complete	• Journals need to be turned in at regular intervals to check progress.
•	Poor writing skills for junior-level students	• Gaining proficiency in writing needs to be strongly emphasized. Students would have benefited by having the chance to turn in multiple drafts, revise and resubmit for an improved grade. Instructional resources for this were nonexistent.
•	Lack of understanding about team-teaching process	• Need guidance on team teaching process. Teaching & Learning Center could be a resource here.
•	Lack of overall resources to implement the kinds of instructional support needed to ensure the success of the course	 Need to gain support of faculty and staff. Faculty and advising staff in some disciplines did not understand the nature of the course and misinformed students about it or cast the course in a negative light. Some information that advisers gave was entirely inaccurate. Need a full or at least half-time staff member to ensure that the nuts and bolts of the course are in order (e.g., course policies, due dates, etc).

Core 100 Results: Quantitative & Qualitative Student Feedback

In addition to informal feedback received by Core 100 faculty, data were collected via a Final Course Review. Although this was only the first offering of Core 100, this initial baseline data will be useful to evaluating the success of the course moving forward. Below is a summary of the key data results from the Final Course Review. The total number of students who completed this survey was 122.

- After completing Core 100, 60% of students indicated a high degree of understanding regarding general education compared to 20% who indicated a low degree of understanding.
- 70% of students indicated that their contribution to the group project was always equal to other team members, while 14% indicated that their contribution was rarely equal to that of their team members.
- 57% of students responded that there were few or no clear connections between the discussion section and lectures.
- 52% of students responded that there were few or no clear and logical connections between the lectures and the team project.
- Overall, students found that Core 100 provided information and support in developing skills. When asked to rank the extent to which Core 100 helped students achieve a list of skills, students indicated their responses on a scale from A(Not at all) to E(Very Well). Most notably, Core 100 helped students develop in the following areas:
 - Understanding the value of different perspectives: 46% (Very Well) compared to 26% (Not at all)
 - Solving intellectual and ethical problems: 42% (Very Well) compared to 29% (Not at all)
 - Composing an argument: 38% (Very Well) compared to 28% (Not at all)
 - Using evidence responsibly and appropriately: 43% (Very Well) compared to 25% (Not at all)

• Working collaboratively: 43% (Very Well) compared to 25% (Not at all) *Note: Unless otherwise indicated, the survey results were based on a five-point scale. The middle data point was considered neutral. Points 1 and 2, or A and B as it may be, were collapsed to represent the "low" end of the scale and points 4 and 5, or D and E, were collapsed to represent the "high" end of the scale.

Data from students revealed some frustration with the course, due mostly to the lack of resources allocated to the course and an unclear understanding as to why the course is a requirement. One engineering student who had also participated in service-learning called Core 100 a "poor man's service learning." Students contemplating professional careers in areas like medicine, law, and business were resentful of the fact that their course grade was dependent on someone else's performance or the lack of it. Other students came in with positive expectations but the lack of organization created some frustration.

Some students absolutely loved the course because of its focus on developing team-based multidisciplinary solutions to societal problems. These were students who came in with an interest in civic engagement. To support their enthusiasm, Core 100 faculty wanted to develop a website to post their solutions and background information, but lacked the resources. A substantial fraction of the students really learned something in the course, as reflected in their journals. An example was one student who was uncomfortable with public speaking, and indicated, "this is very much out of my comfort zone and very much a growing experience." It turned out that she was very effective at public speaking and was asked by her teammates to be the leader, a role she did not see herself fulfilling until she took the course. Other students expressed similar experiences.

2. Service Learning Program

Service learning is a significant innovation in the teaching of Engineering, focused on such outcomes as designing systems, applying knowledge, functioning on a team, communicating, understanding professional and ethical responsibility, and solving problems. The UC Merced Service Learning Program was initially funded through NSF and is now supported through an endowment establishing the Foster Family Center for Engineering Service Learning - A National EPICS Site at UC Merced. Examples of first year projects have included:

- California State Mining and Mineral Museum, Mariposa: Design a natural lighting system for gem and mineral display in new building. Assess other energy needs. Emphasis on solar optics, energy science and engineering, and mechanical engineering.
- Castle Science and Technology Center, Atwater: Design and build exhibits aimed at middle-school children for CSTC museum. This year's focus is on an interactive nanotechnology exhibit. Emphasis on bioengineering, materials engineering, computer science and engineering, and mechanical engineering.
- Resources Management and Science Division, Yosemite National Park: Design a digital library for the client. The initial focus is on water quality data. Emphasis on environmental engineering, and computer science and engineering.
- Merced County Office of Education, Merced: Design curricular materials for K-12 students to teach physics, chemistry, and biology principles in a materials engineering context. The initial focus is on bioengineering examples.
- A Woman's Place, Merced: Design and implement solutions to information technology needs for battered women and their children, and victims of sexual violence. Emphasis on computer science and engineering.

Assessment	Description of Assessment Measure	Status		
Measure				
Service	All students enrolled in service learning complete	The pre and post survey were		
Learning	a pre and post survey. The pre- and post-surveys	implemented in both the Fall and the		
Student	collect demographic information, but are also	Spring. Data will be provided in the		
Survey	focused on obtaining student information on six	results section.		
	factors:			
	(1) Personal Development (empowerment, skills,			
	and career)			
	(2) Social Development (teamwork and cultural			
	awareness)			
	(3) Ethical Responsibility Development			
	(4) Perceptions of the Engineering Culture			
	(5) Civic Participation			
	(6) Academic Achievement			
	Each question on the survey maps to one of the			
	above factors and each of the factors is linked to			
	the goals of service learning. Our goal is to go			
	beyond the traditional program evaluation that is			
	focused on assessing satisfaction and			
	quantitatively assess service learning students on			
	meaningful factors.			

Overview of Assessment:
Content Assessment	To assess the substantive, content-related ABET outcomes, UC Merced will go beyond the traditional self-report mechanisms and satisfaction surveys. The most direct measurement of our outcomes will be the student work product ratings for those students enrolled in service learning. The work product ratings will be provided through self and peer evaluation, faculty and client evaluation, and the SL Executive Committee. By using these different methods of content assessment, we will be capable of collecting and assessing quantitative feedback on both process and substantive content. To do this, we are implementing an evaluation rubric, which will focus on the Engineering process.	A longer version of the rubric was used in the Fall; however, we found that students complained that the process of peer evaluation took too long and thus provided little motivation to complete. Given the amount of assessment involved with just this one course, we did not want to overwhelm students. Thus, we developed a condensed version and used that in the Spring. This was successful with the students.
Instructor Survey	UC Merced instructors who teach the service learning courses will also complete a survey.	Instructor surveys were not used until the end Spring semester.
Client Assessment	A client survey was adapted from the existing EPICS Partners Questionnaire. The survey focuses on the project and student performance in terms of client satisfaction with (1) communications with the team, (2) responsiveness of the team to the problem, (3) student skill level, (4) work quality, and (5) professionalism. Comments will be solicited as to how the project could have been better executed and how the SL experience could have been improved from the client's perspective. Clients will participate in the evaluation of student work products and outcomes.	We implemented the client survey at the end of Spring semester. Fall was a hectic semester and much of the programmatic issues were being worked out with respect to client visits, project parameters, etc. We worked closely with the clients during Fall semester and sought feedback from them qualitatively. This better prepared us for implementation of a survey at the end of Spring semester.
Student Survey	The student survey will be very similar to the survey given to service learning students; however, certain questions will be added in order to determine whether the student has participated in service learning, for how many credits, and whether their high school environment required any type of community or service learning. Students will be recruited from all Engineering majors to participate in this study.	With this survey, we anticipate being able quantitatively to answer critical questions about the role and impact of SL and other educational innovations in the Engineering curricula as compared to those students who do not enroll in SL; and to determine short-term and long- term impacts of such innovations, including changes over time.
Registrar Data Analysis	In order to build in an additional level of evaluation and research, as well as an internal check of our data, we plan on conducting a registrar data analysis. Through cooperation with the UC Merced Registrar, we have established an online system that provides students with the opportunity to consent to the use of their data by filling out a consent form when they register for their courses. The data requested include: gender, ethnicity, age, high school rank, high school GPA, SAT score, ACT score, major, residency, citizenship, major GPA, overall GPA, financial aid, courses enrolled in, and credits earned.	We worked over this year to establish the mechanism that would allow us to collect the data. This required obtaining the necessary Institutional Review Board approval, working with the registrar to both obtain the data and administer consent forms, and put up the online system. This is now complete and ready for implementation.

The complete Service Learning First Year Assessment Report will be found in Exhibit 4.6-5.

Topic B.Groundwork in College Content and Skills: Merced Writing
Program

Merced Writing Program First Year Assessment

<u>Assessment Activities for AY 2005-2006</u>: The Merced Writing Program (MWP) conducts extensive student-based, teacher-based, and program-based assessment of our WRI 1 and WRI 10 curriculum, courses that essentially all first-year students must complete. We also collaborate in assessment of Core 1 and Core 100, courses like ours that fulfill university requirements. As part of a project funded by the Spencer Foundation, next academic year we plan to extend this collaboration to relevant courses in natural sciences and mathematics.

To establish a baseline of information about our first year of classes, the MWP had students in WRI 1 and WRI 10 complete the following assessment activities during AY 2005-2006: semester initial, midterm, and semester final questionnaire surveys (teachers also completed similar forms for comparative purposes); pre- and posttest essays; and focus-group interviews. We also had students submit portfolios of all work completed in each course.

Team members exchanged and evaluated student writing so that they could affirm the consistency of their grading standards. At the end of the semester, each instructor in each teaching team then identified a low, mid, and high example of student performance exemplified by that student's cumulative work submitted in a course portfolio. After exchanging these portfolios, colleagues in each team would attempt to confirm the low, middle, and high assessment without knowing beforehand how each portfolio had been rated. This assessment provided baseline information about failing, average, and high quality student writing in WRI 1 that was completed in Fall semester, 2005. A subsequent study, not yet finished, will match ratings for selected portfolios with students' course grades.

For program assessment purposes, all MWP faculty participated in a "double blind" evaluation of student writing that had been completed in WRI 10, Spring semester, 2006. Nearly 550 pre- and posttest samples were randomly selected for this review, a total that represented about 50% of all students taking WRI 10 in the spring. Using a sixpoint rating system, at least two faculty readers judged the quality of students' writing without knowing if the sample being evaluated was a pretest or posttest and without any indication of a colleague's prior rating. Preceding this review, all readers had participated in a norming session that had established a high degree of consistency in ratings assigned to sample essays. During the actual review of essays, readers maintained a relatively high degree of consistency at .82 for identical or contiguous assignment of ratings (the latter might be a 4 and 5 or 1 and 2). <u>Results of Assessment Activities and Discussions</u>: The results of our pre- and posttest assessment show that, overall, students in WRI 1 improved as writers, averaging a gain of .6 on the six point rating scale. This result is a statistically significant gain (\geq .05) but one that initially may appear quite modest. However, two factors must be considered when interpreting this result. An impromptu, in-class writing assignment is just a snapshot of student performance on a single type of writing; moreover, it is generated as impromptu writing in 50 minutes rather than a finished essay produced over several days or weeks in several stages of revision. Compared to similar pre- and posttest evaluations conducted at other universities, we can affirm that a .6 gain is a robust effect; moreover, by comparing our results from Fall semester to those from Spring Semester, we can also infer that our students' improvement as writers is due to instruction offered in WRI 10.

Before Fall semester 2006 begins, MWP faculty will meet for several days of retreat preparing for our second year of classes. As part of that preparation, results of AY 2005-2006 student and faculty questionnaires will be considered, with specific attention to these items:

- Course-initial and midterm questionnaires that students and faculty completed; these results will help us to determine how well students are prepared for our courses and how closely course grades correspond to student/faculty judgments of writing ability.
- An end-of-semester questionnaire survey that students and faculty completed; the results will enable us to gauge what students and faculty <u>believe</u> has been taught and learned; we can also consider changes they have recommended to improve a course. These surveys are in addition to the university-required survey of instructor performance.
- Student-focus groups that were convened the semester after students had completed WRI 1 and WRI 10; from summary reports of these meetings we will have additional information about the transition from WRI 1 to WRI 10.
- One purpose of the MWP's teaching teams has been to refine course syllabi, and for AY 2006-2007, this effort has produced a new "theme-based" design for the WRI 10 curriculum. During our August retreat we will discuss proposed themes for science fiction, nature writing, medical science, and language policies, among other options.
- A related outcome for the design of WRI 1 will be reconsideration of its thematic focus on diversity. From our surveys of first-year students, we have learned that a majority of freshmen wrote papers in high school on the topic of diversity. Although familiarity with this topic is not necessarily a problem, we will be discussing at the August retreat if WRI 1 should be entirely devoted to issues of linguistic diversity rather than cultural diversity. That adjustment would minimize overlap with high school coverage of cultural

diversity, but it would also potentially require adoption of a new textbook for this course as well.

As the university develops other tools and procedures for assessment of teaching and learning, we will adapt our efforts to complement those broader initiatives. The complete Merced Writing Program First Year Assessment Report can be found in Exhibit 4.6-3.

Topic C. Progress in Graduate Program Development

Graduate education at UC Merced is organized around seven multidisciplinary groups that are composed of faculty from across the three schools. These include Environmental Systems, Quantitative and Systems Biology, Atomic/Molecular Science and Engineering, Applied Mathematics, World Cultures and History, Social and Cognitive Science, and Computer and Information Systems. Each of these nascent graduate groups has been provided an interim authority by the system-wide Coordinating Council on Graduate Affairs (CCGA), a committee of the Academic Senate, to accept graduate students at either the masters or doctoral level. This authority, although not time limited, does include an expectation that the nascent graduate groups will submit documentation to complete the process of establishing formal graduate groups. The process includes a formalized external review that is managed by CCGA. The process of program review starts at the campus Council on Graduate Affairs. The first of UC Merced's documents for the Environmental Systems group was reviewed internally during the past year and returned for modification prior to submission to CCGA in the coming year. Next year this group should receive a complete review from the other campuses of the UC as well as from external reviewers with specific expertise in the areas of study.

The expectation is that each of the nascent groups will submit their documentation during the coming years as their faculty numbers increase and the scholarly focus of each becomes better defined. Subsequent external reviews of each interdisciplinary graduate group or disciplinary specific program will be conducted at five year intervals.

Topic D.Student Affairs Departmental Assessment Plans and Results
for 2005 - 2006

During Spring 2005, a comprehensive plan for assessment in the Student Affairs Division was developed. The leadership of Student Affairs held a retreat in January 2006 to discuss what was learned during the fall semester and to modify plans, services, and policies for the spring. All Student Affairs departments understand that the implementation of the assessment plans is essential to the continued growth and success of their programs, and they intend to refine and implement their plans fully during the 2006-2007 academic year.

The complete report on Assessment Plans and Results can be found in Exhibit 4.6-2b. Examples of findings appear below, with a plan for using results contained in the Career Services Center example.

Campus Recreation:

Tracking Student Use of the Intramural Sports and Outdoor Adventure Programs To track the student usage of Intramural Sports program during 2005-2006, the Campus Recreation office collected the following information:

- Numbers of participants per sport
 - o Flag Football 96
 - o Basketball 77
 - \circ Soccer 72
 - Grass Volleyball 25
 - o Tennis 12
- Numbers of participants per trip/event
 - Total number of participants in all trips 57

Career Services Center (CSC):

At the time of this report, these data are not complete. However, we have the following information about student usage of CSC services:

Scheduled Appointments	224 – Career Counselor Only
Email Consultation	25 – Career Counselor Only
Individual Students Participating in Career	158 – Career Counselor Only or 18% of
Counseling Services	the student population
Visits to the Career Services – Other than	1636
Scheduled Appointment	
Individual Freshmen Served	114 or 16% of the Freshman Class
Individual Transfers Served	38 or 28% of the Transfer Class
Individual Graduate Students Served	2 or 5% of Graduate Students

Tracking of On-Campus Student Employment -

Number of On-Campus Student	94			
Employment Position Announcements				
Posted				
Number of Applications Submitted by	1946			
Students				
Number of UC Merced Undergraduate	272			
Students Employed On Campus				
Total Number of Workshops, Classroom Presentations, and Panel27				
Discussions for UC Merced Students				
Students Attending Classroom Presen	64			
Students Attending Workshops and P	346			

Students Attending Etiquette Dinner	50	
Students Attending Internship Fair	238	
Total Number of Workshops/Presentations for Community	6	
Members conducted by CSC Staff		
Total Number of Community Members Attending	137	
Total Number of Workshops/Presentations for Faculty Staff	9	
conducted by CSC Staff		
Total Number of Faculty/Staff Attending	114	

Tracking of Employer Use of Services -

The College Central Network system and our own tally of opportunities not posted on College Central Network provided us with the following information:

Employers

- Number of Employers Registered on College Central Network (CCN) 137 Jobs
- Total Number of Jobs Posted for Students at UC Merced 365
 - o Full Time Jobs 121
 - Posting Listing Multiple Opportunities 4
 - o Off-Campus Part-Time Jobs 83
 - On-Campus Part-Time Jobs 94
 - Summer Only Jobs 9
 - o Camps 2
 - Internships 52
- Number of Jobs Posted via CCN 214
- * One job could be listed as multiple types (i.e. full-time or part-time)

This information will be used as baseline data and will be compared to the percentage of students served by the other UC campuses.

Satisfaction –42% of students reported that they were very satisfied with the services offered by the Career Services Center. 54% indicated that they were somewhat satisfied.

Use of Information

The use of this year's and future year's tracking information regarding student use of individual services will assist the CSC in making decisions regarding:

- Staffing and the allocation of staff time
- Strategies for marketing services to students, ensuring that the students who use the CSC are representative of the university's student population
- Annual purchasing of resources such as assessment tools, books, software and web-based applications

The tracking of participation in workshops, presentations, and events will be used to determine which topics are of most interest to students.

Tracking of the use of employer services and recruitment events will:

- Provide information regarding recruitment trends
- Assist in the development of targeted marketing to employers of interest to UCM students
- Enhance the CSC efforts to assist employers in the effective marketing of their opportunities to UCM students
- Assist in the decisions regarding the budget for recruitment activities and fees to employers for services

Counseling Services:

112 students (13 % of student population) were seen for crisis intervention, individual therapy, and group therapy at Counseling Services during 2005-2006. On average, about 8 - 10 % of the student population are seen during a 12-month period at university counseling services at UC campuses.

Counseling Services provided 321 consultations, programs, workshops, "house-calls" (totaling 504 hours) to faculty, academic departments, parents, students, Housing staff, Medical staff, and other staff/administrators. Consultation areas and time spent per area are listed below:



Financial Aid and Scholarships:

The financial aid process is data-intensive. The Office of Financial Aid and Scholarships uses a number of resources to ensure that students are receiving the appropriate amount of financial aid and that the funds are processed in a regulatory compliant and fiscally responsible manner. It is important to understand the volume of data elements that are collected and reviewed during the aid process as well as the number of issues that require deviation from our automated processes. In order to assist us in this area, the OFAS tracked the following information for 2005-2006:

- Number of applications received/processed
 - 6205 applications received/processes
- Percentage of total students applying for financial aid (broken down in various ways including by gender, ethnicity, major, grade level, etc.)
 - Of the 875 enrolled students in 2005-06, 80% received offers of financial aid and 64% of that amount qualified for need-based financial assistance.
- Total dollars awarded/disbursed-Percentage of dollars disbursed from different agencies
 - o \$74,116,317 offered
 - o \$7,777,483 disbursed to undergraduates (as of May 31, 2006)
 - \$352,165 disbursed to graduates (as of May 31, 2006)
- Average total award package and grant vs. loan dollars
 - Undergraduates receiving grant/scholarship: average grant/scholarship package was \$9,285
 - Undergraduate scholarship information:

	2005-06
Money available for new	\$263,299 (included one
undergraduate scholarships	current-use gift of
	\$200,000)
Applicants offered	591
scholarships	
Average offered	\$1,862
SIR'd students accepted	135
scholarships	
Average accepted	\$2,092
Enrolled students receiving	127
scholarships	
Average received	\$1,940

Office of the Registrar:

Tracking of Outreach and Yield Activities-(participation in workshops, presentations and events)

The OTR staff participates in a variety of outreach and yield activities including, but not limited to: Bobcat Day, Undergraduate and Graduate Orientations, Move-In Weekend, Family Weekend, Mid-Semester and Final Grade reporting workshops, etc. The OTR is

By Transaction	Counts for 2005-2006	Percent for 2005-2006
Registration Transactions		
Web Registered	33,121	90.22%
Registered Manually	3,592	9.78%
	36,713	100%
Drop Transactions		
Web Drop	5,215	70.31%
Drop Course Manually	1,489	20.08%
Drop/Delete	481	6.49%
Drop - No Show/No Payment	232	3.13%
	7,417	100%

also responsible for posting all campus announcements to students via email or on the

MyUCMerced Web Portal.

Office of Student Life Statistics

- OSL Activities and Events: 194 events sponsored
- Including cosponsored programs OSL was involved in the planning and implementation of more 244 programs during the 05-06 academic year.
- 57 Student clubs and organizations were registered through OSL
- 30 community service and involvement events were sponsored by OSL.
- 2,801 individuals attended the 30 community service events.
- 435 students expressed interest in participating in student government.
- More than 70% of the UC Merced student body voted in the first Associated Student election process.
- 95 students signed up to participate in the first annual All-University Leadership conference and approximately 60 completed the program (participant feedback for this two day event was overwhelming positive).
- 35 students were referred to Student Judicial Affairs for campus policy violations or academic dishonesty violations.
- 15 academic dishonesty cases were handled by faculty.
- 7 conduct related cases were adjudicated through Judicial Affairs.
- 6 students were placed on University probation.
- Approximately 1500 people participated in Intercultural programs including such programs as Rainbow festival, Black History Month, International festival, World Aids Day, Cultural Networking socials, and the Clothesline Project.

Results of Satisfaction Assessment

Based on the information gathered during the 2005 -2006 year regarding the satisfaction with Office of Student Life programs, the following feedback was gathered:

• Students enjoyed the variety of programs provided in the OSL focus areas.

- Students enjoyed opportunities to get off campus and participate in community events.
- They enjoyed the opportunity to be involved in the planning of programs and events.
- Students enjoyed and wanted more theme activities such as the cultural celebration days or months.
- Students were excited about the opportunity to create clubs and organizations.
- Students felt that they wanted more activities on campus and off campus.
- Students wanted larger events like concerts, battle of the bands, and trips out of town.
- Students wanted more and easier access to programming space.
- Students wanted more information about what was happening on campus.
- Students wanted start-up funds for their club and organizations.
- They wanted less red tape and clearer procedures to do such things as reserving program space, securing equipment, bringing in outside vendors, and conducting fundraising activities.

Student Advising and Learning Center:

See Section II, Topic E for Highlights.

Student Health and Wellness Services (SHC):

The Student Health Center (SHC) provided direct medical services and health promotion services to registered students of UC Merced during Fall 2005 from September 6 to December 21, 2005, for 74 total service days with operations Monday through Friday from 8 am to 5 pm. During this period the SHC served 220 students, 209 undergraduate students, and 11 graduate students. This represents 25.1% of the population based on a census of 875 registered students.

Outreach Activities for Fall 2005

Collaboration Event		Student Participation
Housing	Condom Revolution – Sexual Health Program	220
	Sip It Safely – Alcohol Program	20
	e-CHUG Alcohol Education	99
	e-CHUG Sanctions	20
Student Life	Clubs & Organizations Alcohol Education	210

Community	Bi-National Health Fair	175
	V-Day Women's Health Fair	120
Campus Outreach	Blood Drive – October 2005	79 registered – 58 donated
	Blood Drive – December 2005	49 registered – 40 donated

Student Housing and Residence Life:

Resident Participation in Programs Offered by Residence Life Staff

In addition to the data collected according to the assessment plan developed in Fall 2005, information was gathered regarding residential programs. Overall, programs were fairly well attended and definitely rated highly. While faculty had an especially challenging first year, nevertheless, 23 faculty participated in programs hosted by housing staff.

Year End Statistics	Celebrating Community	Civic Leadership	Ethics & Decision Making	Leadership & Teamwork	Student Success	Total
# Programs Completed by Category	67	16	7	6	25	121
Total Resident Attendance	2856	1139	496	118	1377	5886
Total Funds Allocated	\$5,258.50	\$1,367.63	\$595.56	\$486.96	\$1,703.80	\$9,412.45
Avg. Cost per Resident	\$1.84	\$1.20	\$1.20	\$4.13	\$1.24	\$1.60
Programs w/ Faculty Involved	3	4	1	0	2	10
# of Faculty Attended	5	10	1	0	7	23
Avg. Student Evaluation Rating	4.55	4.76	4.38	4.52	4.44	4.53

Students First Center:

Tally of General Services

The tally of general services has been compiled for 2005-06 for the academic year from September 2005 to May 2006. Charts detailing the total number of contacts by department and by week are attached to this report. The number of contacts by department and delivery method are summarized below.

		in		by			
	%	person	%	phone	%	e-mail	TOTAL
Admissions	14%	469	86%	2,838	0%	0	3,307
Financial Aid	80%	2,019	20%	502	0%	0	2,521
Registrar	93%	2,283	7%	165	0%	3	2,451
Other SA (1)	93%	789	7%	58	1%	5	852
Other SA (2)	86%	3,477	14%	546	0%	3	4,026
TOTAL	69%	9,037	31%	4,109	0%	11	13,157

Total contacts from September 2005 to May 2006

Topic E.The Students Speak: Evaluation of the First Year Experience
at UC Merced: Results from NSSE and UCUES

The Office of Institutional Planning and Analysis conducted three web-based surveys of undergraduates over the 2005-2006 academic year, the New Student Survey (Fall 2005), the National Survey of Student Engagement (NSSE) (Spring 2006), and the University of California Undergraduate Experience Survey (UCUES) (Spring 2006). The NSSE was administered via the web to the population of UC Merced undergraduates who began as new freshmen or transfers in Fall 2005 and continued on in Spring 2006. A total of 783 students were invited to participate in the survey. The overall response rate was 44%, which is somewhat higher than last year's response rate (42%) for all Spring 2005 NSSE participating institutions.

Selected Results: A small majority (54%) of freshmen said they have already, or plan to, work on a research project with a faculty member outside of their coursework. The latter three percentages are all higher than the corresponding percentages reported for both doctoral and baccalaureate institutions. This suggests that when it comes to more substantive interaction with faculty, UC Merced freshmen are somewhat more comfortable with faculty than their counterparts at other colleges and universities. Among transfers, 82% said they had, or plan to work on a research project with faculty outside of course or program requirements. Substantial majorities of UC Merced freshmen also reported their courses strongly (quite a bit or very much) emphasized higher order mental activities, including analyzing the basic elements of an idea, experience, or theory (80%), synthesizing and organizing ideas, information, or experiences into new interpretations (69%), making judgments about the value of information, arguments, or methods (73%), and applying theories or concepts to practical problems or new situations (73%). In addition, 81% of freshmen reported often or very often working on a paper that required integrating ideas of information from various sources. All of these latter percentages are higher than the corresponding average percentages at both doctoral and baccalaureate institutions. Transfer students (56%) were less likely than freshmen (70%) to say that memorizing facts is strongly (quite a bit and very much) emphasized in coursework, and more likely to say higher order mental activities is emphasized, such as analyzing (91% vs. 80%), synthesizing (75% vs. 69%), and making judgments (78% vs. 73%). Transfers and freshmen responded similarly in terms of how frequently they applied theories or concepts to practical problems or new situations (73% saying often or very often). A slightly greater percentage of transfers (85%) than freshmen (81%) reported they were regularly (often and very often) working

on a paper that required integrating ideas of information from various sources. These differences make sense because transfer students, after two years in college, would be more likely to take courses that expect them to integrate and apply that information. Seventy-eight percent evaluated relationships with faculty as available, helpful, and sympathetic, while 60% said relationships with the administrative staff are helpful, considerate, and flexible. These percentages were all higher than those reported for doctoral-extensive universities, but lower than those for baccalaureate-liberal arts colleges. Transfer students were more positive about the quality of relationships. Eightseven percent of transfers rated the relationships with students as friendly, supportive, and creating a sense of belonging, and 87% percent also evaluated faculty as available, helpful, and sympathetic. Sixty-nine percent said the administrative staff is helpful, considerate, and flexible. Transfers generally provided slightly lower responses than freshmen on the four supportive questions. The percentages given by UC Merced freshmen for analyzing quantitative problems and solving real world problems were higher than those for both doctoral and baccalaureate institutions. This might reflect the emphasis on quantitative analysis along with real-world problem-solving in Core 1 (general education). Areas where UC Merced freshmen appeared to be weakest, compared to both the Doctoral-Extensive and Baccalaureate-Liberal Arts institutions included "voting" (19% vs. over 50%), "learning effectively on your own" (58% vs. 70% or more), "understanding yourself" (54% vs. 60% or more), "acquiring job-related knowledge and skills" (49% vs. 55-56%), "contributing to the welfare of your community" (34% vs. 43-52%), and "developing a deepened sense of spirituality" (25% vs. 32-33%).

Compared to freshmen, transfer students were especially positive about UC Merced's contributions to working effectively with others (80% vs. 68%) and solving real-world problems (69% vs. 55%), probably because their upper division classes provide more opportunity for collaborative learning and applied problems.

Overall Satisfaction. Finally, the NSSE asked three overall rating or satisfaction questions. Sixty-nine percent of freshmen rated the quality of academic advising as good or excellent, while 75% gave the same ratings to an evaluation of their entire educational experience at UC Merced. Responding to the same questions, 71% of transfers rated advising good or excellent, and 80% similarly rated their entire educational experience. Asked if would come to the same institution if they could start all over again, 72% of freshmen said they probably or definitely would attend UC Merced, as did 82% of transfer students. Although strongly positive, these percentages are lower than those for both doctoral-extensive and baccalaureate-liberal arts institutions. But given the fact that the campus was still under construction when classes started in Fall 2005, the percentages are pretty remarkable.

UCUES provides information that UC Merced expects to use in several ways:

- 1. As feedback from students to indicate ways the campus can improve the undergraduate experience.
- 2. As indirect measures of learning outcomes that can be used, along with other types of information, for academic program reviews and regional accreditation.

3. As one of many sources of information about our students, over time, to help determine how differences in students' backgrounds and experiences affect their learning.

The UCUES survey provides detailed information about our students' immigrant status, English language fluency, parents' and grandparents' educational background, as well as socio-economic status. California has a rich immigrant history that contributes to the changing educational tapestry in the State. Perhaps faster than any other State, California is rapidly changing in terms of ethnic distributions and majority representation. At UC Merced, in the heart of California's Central Valley, 17% of the new freshmen and 26% of the new transfers were foreign-born. About 60% of the new freshmen had mothers and/or fathers who were foreign-born and 65-69% had one more grandparents who were foreign-born. These percentages were slightly lower for new transfers: about 50% had mothers and/or fathers who were foreign-born and 58-64% had at least one grandparent who was foreign-born. This is comparable to the findings for the other eight UC general campuses, on average.

Among detailed questions about the undergraduate experience at UC Merced, UCUES asked, what are the most important ways that UC Merced could create a better undergraduate experience for its students? The most common response to this openended question was *More Courses*. Thirty percent gave this as their number one way to improve the campus. A total of 46% gave it as one of their three top ways. The second most important thing the campus could do was to provide *More Majors*. Sixteen percent listed this as their top way to create a better undergraduate experience; 21% listed it as one of their top three ways. The third most important thing the campus could do was to provide *More or Better Campus Activities*: 10% listed this as their top way; 27% listed it as one of their top three ways. Finally, the fourth most important thing to improve was *More or Better Food Options*. (This actually was the third most popular way to improve the undergraduate experience when all the first, second, and third choices were combined. Thus, 4% indicated it was their top choice; 22% listed it as one of their top three choices.)

Detailed reports on the NSSE and UCUES results can be found in Exhibits 2.10-3b and 2.10-4b, respectively.

Conclusion: Integrating What We Are Learning: Braiding the Assessment Strands into a Unified Approach to Educational Effectiveness

The first full year of operation has been challenging, exhilarating, and exhausting for faculty, staff, and students alike. Over and above the predictable challenges of opening a new residential research university and breaking in new facilities and operational systems, the campus faced unanticipated problems such as lags in availability of teaching and office spaces on a campus that was also a construction zone. The flexibility, inventiveness, energy, and sense of humor of the whole campus community was taxed to the utmost, as faculty and staff went far beyond the "normal" workday to solve problems. By the time an exhausted faculty and staff reached the summer, it was clear that both reflection and planning would be essential to sustain a manageable second year.

UC Merced's opening year class was unusual in the dominance of freshmen, most away from home for the first time. The ameliorating influence of upper classmen in helping introduce new freshmen to college life and expectations was not present, as even the junior-level transfer students were adjusting to a new and volatile environment. The range of assessment activities reported here offered many lenses on the initial undergraduate experience and ways of learning. These were as various as the Student Advising and Learning Center's interventions with students in academic difficulty, student and faculty feedback on the ambitiously experimental Core Course Sequence and Service Learning program, data on which student services were used and how, and direct student commentary on their UC Merced experience through campus, UC and national survey instruments. All together, these sources of information have created a robust baseline of information on student needs, learning styles, interests, and characteristics that will be an essential building block in assuring that UC Merced achieves its educational goals.

UC Merced faculty and staff are in the unique situation of observing at very close range their pioneer classes grow educationally while the campus itself grows physically and organizationally. A host of insights have emerged and are emerging, as the greater campus community reviews and understands the results of the myriad assessment initiatives. This Educational Effectiveness Report itself is a means to communicate multiple sets of results, as both Report and supporting Exhibits are posted on the Accreditation website, accessible to all. The planned end-of-summer retreat on general education, new faculty orientation, and leadership forums such as the Chancellor's Cabinet, Faculty Senate, and Student Government meetings are places in which assessment results reported here can be brought together as a means to focus on how our students learn and what strategies and interventions can improve that learning. The role of the new Center for Teaching and Learning, together with the Office of Institutional Planning and Analysis, will be central in helping with gathering and interpreting evidence, bringing together the disparate strands of assessment, and supporting planning for continuous improvement in meeting UC Merced's educational mission.

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I thank you all for helping provide a comprehensive view of how UC Merced seeks to carry out its educational mission.

Karen Merritt, Coordinator, Educational Effectiveness Report