

*2008-2009 Annual Summary of Academic Program Assessment at Sacramento State*

Prepared by the Office of Academic Program Assessment

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This paper provides a quantitative and qualitative analysis of the collection of annual academic program assessment reports that were submitted to the Office of Academic Affairs on or around July 1, 2009. These reports contained information about assessment focuses, findings, and related activities that took place during the 2008-2009 academic year. The full set of reports is available online at the Academic Affairs website.

Divided into two sections, the paper first presents information regarding assessment focuses and findings for each program within each College that submitted a report. The second section provides commentary on the findings with a discussion of issues that warrant consideration. The intent is to describe assessment findings campus wide as a way to communicate to stakeholders what our faculty in the various programs learned about their students, their curriculum, their instruction, and their students' take-aways from the programs.

Note that the Appendix to this report includes information about students' mean GPA for each department within each college for which the Office of Institutional Research (OIR) has prepared a Department Fact Book. OIR has classified GPA data as "outcomes" data and presents this information separately in each Department Fact Book. In this report the GPA information has been reorganized into college tables so that it is possible to consider information about direct assessment of student learning outcomes in the tables located in the body of this report with mean GPA per department. Faculty may have an interest in doing such exploration as a way to discover relationships between actual grades students receive as viewed through the lens of OIR and direct assessment information as viewed through the lens of the Office of Academic Program Assessment.

## SECTION ONE: PRESENTATION OF ASSESSMENT FOCUSES AND FINDINGS

The WASC Review Team's Educational Effectiveness Report provided to the campus community in June, 2009, noted that the first two annual summaries of assessment on campus missed the opportunity to speak to concrete question of what and how well students were learning. Indeed, the first two reports covering assessment during 2006-2007 and 2007-2008 were silent on this question. Instead, these reports analyzed information about what and how our programs were *assessing* student learning, a completely different matter. They also provided information about how many and what programs actually submitted reports in keeping with a culture of compliance that had developed over time.

As the WASC Report stated, however, our institutional culture is in the midst of a shift from a culture of compliance to a culture of evidence wherein assessment and assessment reports are done not simply to check a box, but to cast a light on our work in relation to our goals so that we

can continuously improve what we do. So the present report represents a change in approach to the annual summary.

Although we can say that most departments and Colleges are cooperating with Academic Affairs and are submitting reports in a timely manner (note that a total of 44 reports were submitted at the time of this writing, a lesser number of reports than were submitted last year), we know that our submission rate now reflects the fact that the Deans are playing a much stronger role in holding departments and programs accountable and in some cases sending reports back to the department or program for revision. We expect to see more reports representing more of our programs as the year progresses—reports that will reach us too late for inclusion in this summary.

The increase in submissions in the past two years was important because it gave us a glimpse into our developing capacity to assess student learning and to use the findings for quality improvement. Although as a campus we have still not yet reached the place where we can answer big questions of student learning like ‘How well do all Sac State students do on measures of critical thinking?’ we can now show concrete, documented evidence that our academic programs do produce learning and that we understand enough about what and how well students are actually learning that we can make changes confidently.

The remaining portion of this section is made up of Tables which summarize, always using the very language of the program report or a version of this language condensed for this publication, what learning outcome(s) were assessed and what the faculty learned about the qualities of student performance from the assessment. Any reader who wants a deeper understanding of any particular program’s assessment activities for the 2008-2009 academic year is invited to download the entire report from the Academic Affairs website.

Table 1 reports this information for the College of Arts and Letters. This College sees 3700 undergraduate majors and 550 graduate students taught by 180 tenure-track and 200 part-time faculty. Overall enrollment for Arts and Letters makes up 28% of the university total, the highest of the seven colleges according to the College website, with fully a third of these students in Communication Studies (Department FactBook). The influence of external accreditation agencies on Arts and Letters has been intense in pockets, but this College bears the distinction of having several programs for which special accreditation has not been an element of their history.

Note that ten of the reports from this College focus on assessing student accomplishment in the area of communication, either oral or written, with an emphasis on written communication. Two of the reports (Music and Communication Studies), while they do not focus on student learning per se, do indeed focus on communication—they examined the effects of instructional communication when done in an online or hybrid environment. The focus on communication ranges from learning to draw in Art to learning to speak and listen in French to learning to develop an argument in Philosophy. Note also that faculty appear to be generally satisfied that students are learning appropriately based upon these assessment, although in several areas student work could be improved, and underlying, teachable skills are identified. Specific plans for improvement are available in the individual reports.

Table 1

*College of Arts and Letters: Assessment Focus and Findings*

PROGRAM IN ARTS AND LETTERS	LEARNING OUTCOME	CLAIMS ABOUT OUTCOME
Art	Learning to draw	Faculty are satisfied that students developed to expectations in their drawing courses based on examination of student work at weeks 10, and 15
Comm Studies	student satisfaction and perceptions learning in courses using hybrid podcasts	faculty are concerned about mixed results; students were generally satisfied and believed that they learned as much as they would have in a traditional class; future research will focus on whether student concerns derive from the way the course was operationalized or are inherently connected to the use of hybrid podcasting.
Graphic Design	understand history and trends, produce professional-quality work, communicate, control visual media	students improved in problem-solution communication, producing projects; not so well in idea development, sketching, mock-up
Interior Design	understand history and trends, produce professional-quality work, communicate, control visual media	students meet expectations in applying knowledge of design history to their work; 50% prepared to enter the profession; 50% revealed some or significant weaknesses
Photography	create professional quality work	students have improved in creative thinking, development of clearly articulated concepts, ability to create a coherent

		series of photographs; students need work in creating better overall presentation quality
English	present scholarly and creative productions to a large audience on student conference day	Students generally performed well
French	speaking and listening in French	improvement in task completion, language control, comprehensibility of message, all areas in oral presentation except fluency; concern with students' fluency and use of a wide vocabulary when speaking in spontaneous situations
Spanish	communicate effectively in written language under testing conditions	most students are obtaining a good or excellent score (80 or above), but some students still struggle with writing assignments in their senior year (conventions, developing a thesis problem areas)
History	write a clear expository essay that develops a coherent historical argument and marshal evidence to support an interpretation; reading skills of primary and secondary historical sources; use citation standards appropriate to the discipline of history ( <i>Chicago Manual of Style</i> ).	greatest improvement in their ability to read primary and secondary sources as well as use of appropriate citation standards; improvement in writing skills but department faculty should place greater emphasis on forming arguments and developing grammar skills in upper division courses.
Humanities and Religious Studies	writing an effective research paper	research writing assignment was revised to give more opportunity for students to engage in synthesis
Learning Skills	elementary algebra and geometry needed to succeed in GE level math	students need more measurement geometry and applied graphing.; also, need a continued focus on applied algebra skills.
Learning Skills Writing	incorporating written source material into students' own	Comparison of students who used the "chart method" during writing

	expository writing in ways that lead to success in credit-bearing GE classes	tests with students who did not showed that the chart method supported students in using more of their own ideas, avoiding plagiarism, using more paraphrases rather than direct quotations
Music	student satisfaction with a hybrid delivery mode for graduate students taking a music history course	hybrid format is a viable alternative; online components provide additional ways of learning and assessing learning, such as Online Quizzing and Discussion Board Posting; the majority of students found online components valuable
Philosophy	state the precise issue in writing; produce relevant arguments for (or against) one side of the precise issue in writing; state unexpressed premises and assumptions explicitly evaluate premises and assumptions; distinguish correctly among closely resembling claims; determine whether argument is valid – and if not why r	There were no significant differences in student performance on the assessments from last year or from previous years.
Theater and Dance	develop the practical performance skills and techniques required to ad intellectually and artistically in the performing arts; apply and integrate knowledge of multiple areas of thea and/or dance (i.e. ballet, jazz, choreography, acting, designing, stage managing, dramatic criticism, theatre/Dance history, performance analysis, etc.) to coursework, production, and their desired career goals.	great improvement in skill development and students' ability to apply and integrate their acquired knowledge because of curriculum revisions and advising that enabled students to receive instruction at their level of development (advising strate was crucial); students continue to excel in creating quality public performances of plays, musicals, and concerts; number of students interested in pursuing graduate degrees and accepted into graduate programs continues to increase slowly

Table 2 provides information from the College of Business Administration. According to the Department Fact Book, during spring 2009 the College enrolled a total of 2, 285 FTES, including lower-division, upper-division, and graduate students. According to its website, the College believes it has graduated nearly 40,000 undergraduate and graduate students in the course of its history with roughly 24,000 alumni in the Sacramento region. The College has been accredited by AACSB continuously since 1963.

Because this College has a long history of program assessment developed collaboratively over time in alignment with a highly defined and structured set of standards, in many ways this College is the most organized in terms of assessment on campus and has the deepest concrete experiences with large-scale performance assessment—rivaled perhaps only by the College of Education. For the sake of brevity and clarity in the annual assessment report, this College reports only on learning outcomes for which the target was *not* met. Note that all rubrics in the College are made up of four points. Additionally, the College has an auditing protocol where samples of student work are scored independently to moderate the effects of bias on data.

Table 2 lists the outcomes that involve evidence that students did not meet the target. Committees within the College are at work designing plans for improvement in these target areas, and subsequent assessment in upcoming years will help the faculty determine whether or not their plans result in greater student learning. The report from this College is available at the Academic Affairs website for anyone interested in learning more about the College’s processes, policies, and practices.

Table 2

*College of Business Administration: Assessment Focuses and Findings*

PROGRAM IN BUSINESS ADMINISTRATION	LEARNING OUTCOME	CLAIMS ABOUT OUTCOME
Bachelor of Science in Business Administration	Collected data on all learning outcomes in Fall 08. Learning goals not meeting criteria of 70% or more of students achieving greater than 2.5 out of 4 on measurement instruments are as follows: <b>1.2 Written Communication:</b> Write informational, analytical, and technical documents, which are organized, precise, and relevant. <b>3.1 Quantitative Analyses:</b> Understand when, why, and	continuous improvement through revised improvement plans will be conducted by those courses not meeting the minimum acceptable range

how to use quantitative analyses including statistical models and mathematical techniques for areas such as accounting, finance, human resource, operations, and/or marketing.

**3.2 Analytical Process:** Solve a managerial problem by identifying the factors contributing to the problem, formulating alternative solutions, evaluating the pros and cons, conducting cost and benefit analyses of alternative solutions, and selecting a solution.

**4.1 Ethical Decision:** Make ethical decisions to achieve personal and organizational responsibilities in business context

**4.3 Legal and Professional Regulation:** Analyze the implications of legal and professional regulation for effective problem solving and decision making.

Masters of Business Administration

Collected data on all learning outcomes in Fall 08. Learning goals not meeting criteria of 70% or more of students achieving greater than 2.5 out of 4 on measurement instruments are as follows:  
**3.1 Ethical Decision:** Make ethical decisions to achieve personal and organizational responsibilities in business context.

continuous improvement through revised improvement plans will be conducted by those courses not meeting the minimum acceptable range

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Table 3 reports information from the College of Engineering and Computer Science. According to the College website, one of its aspects that makes it a good educational opportunity for

students is its ability to hold class size down to a ratio of 25:1. The Dean’s message on behalf of the College elaborates on this aspect by describing the instructional approach as a “hands-on, applied program of study” that is geared toward the application of knowledge to problem solving. According to Section 6 of the University Fact Book, the 2007-2008 academic year resulted in the award of 326 total degrees with 74 of them Masters degrees. For comparison purposes, the College of Health and Human Services produced 1,173 degrees (207 graduate degrees), Business Management produced 1,149 (115 graduate degrees), and Social Sciences and Interdisciplinary Studies produced 1,116 degrees (86 graduate degrees).

Like the College of Business Management, the College of Engineering is accredited by a rigorous, defined, and structured external agency (ABET) that has emphasized assessment for a number of years. In fact, this College is currently in the process of re-accreditation, and the annual reports submitted to Academic Affairs represent the same reports the College provided its accrediting agency.

Engineering faces a challenge that is, as far as I can tell, unique to any College on campus in that it must examine evidence of what are called “educational objectives,” that is, evidence of students’ performances after they have worked in the field for five years. The College has made very good use of alumni and employer surveys, industrial visits, focus groups, and student interviews to collect qualitative and quantitative data to permit a careful look into its long-range impact on students. Note that the report for Mechanical Engineering posted on the Academic Affairs website explains the program’s assessment plan, but what was assessed and what was learned about student performance is not documented in the report. Any reader interested in this information is referred to the department.

Table 3

*College of Engineering: Assessment Focuses and Findings*

PROGRAM IN ENGINEERING AND COMPUTER SCIENCE	LEARNING OUTCOME	CLAIMS ABOUT OUTCOME
Civil Engineering	1A Apply knowledge of mathematics, Science, and engineering; 1B use techniques, skills, and modern engineering tools; 2A design and conduct experiments and to analyze and interpret data; 2B design a system, component, or process to meet desired needs; 2C function on a team; 2D function on an interdisciplinary team; 2E	1A target met via analysis of senior survey and licensure exam; 1B target not met by data from senior survey but is met by ratings given to senior projects by practicing engineers (not faculty); 2A target not met by data from senior survey; 2B target not met by data from senior survey but is met by data from EBI survey and from ratings given to senior

identify, formulate, and solve engineering problems; 2F recognition of the need for and ability to engage in life-long learning; 3 communicate effectively; 4A understanding impacts of engineering solutions in the global and societal context; 4B knowledge of contemporary issues; 5A understanding of civil engineering practice; 5B understanding of professional and ethical responsibility

projects by practicing engineers (not faculty); 2C target met by data from senior survey and by instructor observations; 2D target barely met by data from senior survey (engineering faculty are exploring this outcome); 2E target met by data from senior survey and EBI survey and by ratings given to senior project proposals by practicing engineers (not faculty); 2F target met by data from senior survey; 3 target met by senior survey data; 4A target met by data from the senior survey; 4B target not met by data from senior survey; 5A target not met by data from senior survey but is met by data from focus group; 5B faculty consider the target met by data from senior survey and results from a major writing assignment on ethics

## Computer Engineering

1 the importance of the department's individual program educational objectives in the eyes of faculty vs industry advisors; 2 a broad education in computer engineering built upon a solid understanding of mathematics, science, and basic engineering; 3 knowledge of core CpE topics; 4 Identify, formulate, and solve engineering problems; 5 oral communication; 6 written presentation; 7 understands fundamental algorithms; 8 understands four design models in software development;

1 (survey data) agreement between advisors and professors on all but ethical and professional disposition (small disagreement) and knowledge of important human factors and consequences of decisions (large disagreement)—in both cases advisors found the element less important than professors did; 2 faculty and advisors agree that target is met, alumni less so; 3 faculty agree that target was achieved, advisors and faculty do not agree; 4 faculty strongly disagree with the target's achievement while advisors strongly agree it has been met, alumni in the middle; 5 generally well in organization, language and vocabulary, and technical content. Improvement is needed in specific

		<p>areas of delineating the presentation into introduction, body, and conclusion, maintaining eye contact, and identifying of related work; 6 structure of the composition, paragraphing, and conclusion were areas of need; 7 students need to improve; 8 students need to improve</p>
<p>Electrical and Electronic Engineering</p>	<p>1 the importance of the department's individual program educational objectives in the eyes of faculty vs industry advisors; 2 work with contemporary laboratory instrumentation, design and perform experiments, and analyze and interpret the results; 3 work in teams to solve complex design problems; 4 understanding of ethical and professional responsibility and becoming "life-long" learners; 5 knowledge of the important human factors such as safety, environmental impact, and impact on society; 6 all eight educational objectives (see EEE annual report 2009);</p>	<p>1 (survey data) agreement between advisors and professors on most educational objectives; three objectives showed widespread disagreement within and among faculty and advisors; 2 most faculty view as critical or important while most industry advisors view as just desirable; 3 most advisors and faculty agree this is critical or important while a minority of both faculty and advisors rate this objective as less important; 4 faculty view this objective as more important than industry advisors view it, but neither group sees it as critical; 5 wide variation in views for both faculty and advisors; 6 survey of alumni, employers, and faculty revealed 100% agreement among employers that graduates are adequately, more than adequately, or exceptionally well prepared while faculty and students vary, on some items considerably;</p>
<p>Mechanical Engineering</p>		

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Table 4 presents information from the College of Health and Human Services. As data already presented suggest, this College is among the largest on campus in terms of numbers of students enrolled, and its programs are influenced by accreditation and licensure requirements perhaps more heavily than any other college with the possible exception of the College of Education.

Unlike Engineering and Computer Science and Business Management, however, colleges accredited by agencies with common standards and procedures for all programs within the college, Health and Human Services are accredited by a plethora of special accrediting agencies, each with its own particular requirements and expectations. Accreditation for Physical Therapy, for example, is not the same in shape or form as accreditation for Speech Pathology and Audiology.

To complicate matters for this College, a particular department can have several different programs, some of which are externally accredited, some of which are not. In a way reminiscent of the College of Arts and Letters, Health and Human Services has within it departments and/or programs that have long histories of engagement with special accreditation and others that have never participated in this sort of review. In short, Health and Human Services has experienced the same forces of external accrediting agencies over time that have been in play in Business Management and Engineering and Computer Science. It has also experienced the relative distance from external accreditation characteristic of programs in Arts and Letters.

Table 4

*College of Health and Human Services*

PROGRAM IN HEALTH AND HUMAN SERVICES	LEARNING OUTCOME	CLAIMS ABOUT OUTCOME
Criminal Justice	Writing (1 organization, 2 grammar); critical thinking (3 analysis, 4 synthesis, 5 evaluation)	Baseline data were collected in Fall 2008 from seniors, and independent scoring student essays revealed the following average performances: 1 Organization is coherent but simplistic sequencing of events and may have minor digressions; topic sentences and conclusions not present; 2 Writing reflects adequate control of syntax, sentence variety, word choice, and conventions of Standard English. Errors do not slow the reader or impede understanding for the reader in a serious way; 3 writing reflects logical analysis and ability to see obvious linkages and parts but is limited and narrow in context; 4 writing reflects few new ideas generated

		<p>from information presented in assignment, or new ideas that are not logical or innovative. Few, if any, generalizations; 5 Writer shows some ability to be able to compare and discriminate between some facts and theories presented in the assignment and recognize subjectivity. Writer demonstrates some difficulty in reasoning when making arguments based on the information provided in the assignment.</p>
Physical Therapy	<p>General outcomes: Clinical competencies were assessed through the Clinical Performance Instrument (<i>CPI</i>) completed by all clinical faculty after supervising students in the final 3 clinical rotations</p> <p>Particular outcomes identified for program study: 1 Demonstrate Professional Competence, specifically Goal 1B: Evaluation of an individual with a neurological disorder from a case study or actual patient contact. 2 Demonstrating competence with Goal 1D: Reflection on the portfolio process.</p>	<p>General outcomes: Our graduates exceed professional entry-level competencies across the board</p> <p>Goal 1B: The review revealed that our graduates continue to struggle with meeting community standards in this critical area. Goal 1D: Graduates seem to be acquiring a reasonable level of skill with reflecting on their work and learning from their experiences.</p>
Division of Social Work (Undergraduate)	<ol style="list-style-type: none"> <li>1. Apply critical thinking skills to question, understand, and analyze phenomena in the context in which they occur.(Critical thinking)</li> <li>2. Internalize professional values and ethics of NASW's Code of Ethics and the principles for ethical decision making. (Values and ethics)</li> <li>3. Respect the multidimensions of diversity and understand the meaning of these in practice with</li> </ol>	<ol style="list-style-type: none"> <li>1. Target met</li> <li>2. Target met</li> <li>3. Target met</li> <li>4. Target met</li> <li>5. Target not met (improvement needed in gaining knowledge of significant social work trends and issues as they relate to the placement setting)</li> <li>6. Target met</li> <li>7. Target not met (need improvement in understanding</li> </ol>

and on behalf of diverse client systems. (Diversity)

4. Understand the forms and mechanisms of oppression and discrimination and apply strategies of empowerment, advocacy, and social action that advance social and economic justice. (Oppression and social justice)

5. Identify and interpret significant trends and issues in the history of the social work profession and its contemporary practices and issues. (Social work profession)

6. Apply the general problem-solving and strength-based methods and selected theory and skills specific to practice with individuals, families, groups, organizations, and communities, (Generalist practice)

7. Apply developmental and ecosystems perspectives and selected human behavior theories to multidimensional assessments in generalist practice. (Human development and behavior)

8. Assess the relationship of social policies to client system needs and engage in planned activities to develop policies and services responsive to human wellbeing and social justice. (Social welfare policies and services)

9. Develop an empirical base for practice through evaluation of research studies, use of research findings, and evaluation of practice interventions. (Research)

10. Use relationship and communication skills to establish facilitative conditions for professional relationships. (Relationship/communication skills)

11. Use supervision and

of group dynamics and applying this understanding in working with groups. Groups may be task-oriented, therapeutic, or psycho-educational)

8. Target not met [need improvement in ability to do effective organization and community assessment (e.g., resource-mapping, needs assessments, analysis of power sources and dynamics, locating barriers to service, constituency identification, etc.) using a variety of information-gathering approaches and analytical models also in developing and implementing appropriate organization and community development interventions; including task group development, event organizing, developing communication linkages, developing new resources, etc.; also in Recognizes impact of social and organizational policy on client populations.

Familiarizes self with organizational, legislative, and other policy-making processes in order to participate in the betterment of the lives of client/client systems. In policy oriented placements demonstrates policy analysis skills. In all placements, can identify agency policies and structures that may adversely affect clients (both individually and as populations or communities) and can suggest possible changes and ways of bringing about change. Acts on this knowledge in an effective and professional

consultation for continuous development of awareness, knowledge, values, and skills.(Supervision and consultation)  
 12. Use organizational resources to serve client systems and help develop needed resources.(Organizational competence)

manner]  
 9. Target not met (need improvement in identifying strategy for evaluating own practice within agency; demonstrating familiarity with evidence base for agency practice )  
 10. Target not met (need improvement in understanding of group dynamics and applying this understanding in working with groups. Groups may be task-oriented, therapeutic, or psycho-educational)  
 11. Target met  
 12. Target met

Speech  
 Pathology and  
 Audiology

1 Student satisfaction with the program.  
 2 Employer satisfaction with graduates

1 Alumni survey revealed high level of satisfaction (1 = very satisfied, 5 = very dissatisfied). Average responses across all items and indexes ranged between 2.5 (neutral to satisfied) and 1.5 (satisfied to very satisfied). Relatively poorer ratings were given to one question related to how well the curriculum provided research skills required by the discipline with an average score of 2.9. Students rated “Would you recommend the CSUS program to other students interested in speech pathology or audiology?” below 1.25 and 9 of 16 questions below 2.  
 2 Responses indicate that employers believe our students are either equally well trained or better trained in the most recent 5 year period. Employers also indicated strengths in training articulation, fluency, child language therapy as well as ethical issues. They also

indicated improvement could be made in training augmentative alternative communication

Table 5 presents information from the College of Natural Sciences and Mathematics. According to the College website, this College emphasizes hands-on education and encourages student-professor interaction. Students are encouraged to do research as undergraduates, and many of the faculty themselves are involved in research. The College has made a public commitment to promoting the presences of underrepresented students in mathematics and the sciences, a commitment visible in the assessment study conducted by the mathematics faculty when they asked the following question: “What, if any, differences exist between success rates and repeat rates in calculus for the calculus-ready group and the groups of students who are not ready but take either Math 29 or 29A-B?”

In many ways this College provides the campus with a useful example of ways to develop our capacity to do meaningful assessment in a context wherein external prescriptions and pressures are muted. As Table 5 shows, each program focused on student learning outcomes of real significance to the faculty, and evidence was collected and analyzed in ways that afforded insights into curriculum and instruction.

Table 5

*College of Natural Sciences and Mathematics: Assessment Focuses and Findings*

PROGRAM IN NATURAL SCIENCES AND MATHEMATICS	LEARNING OUTCOME	CLAIMS ABOUT OUTCOME
Biological Sciences	1 Content acquisition (e.g., Exposure to representative organisms of the major taxonomic groups: Eubacteria, Archaeobacteria, Protista, Fungi, Plantae, Animalia); 2 Scientific writing skills [Logical progression of ideas (cause/effect), appropriate use of scientific terminology, clear presentation of scientific concept]; 3 Student satisfaction with faculty advising	1 students are consistently performing better at graduation than when they enter the program; 2 Scientific writing skills [Logical progression of ideas (cause/effect), appropriate use of scientific terminology, clear presentation of scientific concept]; 3. Fewer lower division students have seen advisors than in upper division courses. Although both lower division and upper division students feel

		equally comfortable seeking advisors, only about 60% of students felt comfortable seeking a faculty advising appointment. Approximately 80% of students said that they would prefer to seek advising in an advising center
Department of Chemistry	1 Laboratory knowledge and skills; 2 Computer, library, and Information skills; 3 Oral and written communication skills in Chemistry; 4 Quantitative reasoning; 5 Knowledge of chemical principles and facts	<p>Examination of the Capstone poster project results shows that in all classes considered, students are meeting the learning objectives defined by the department;</p> <p>Examination of the standardized ACS test results shows that the Chemistry Department compares favorably compared to the national average. Both sophomore and senior level assessment outcomes are at the National Average using the same exams. This suggests that both our lower division and upper division courses are effectively meeting the learning objectives</p>
Department of Geography	1 identify and describe basic concepts and patterns in physical and human geography; 2 demonstrate competency in one or more of the basic geographic tools/techniques for data collection, display, and analysis; 3 Demonstrate graphic literacy in the use and analysis of maps, graphs, and spatial data sets; 4 Analyze and evaluate scholarly writing within the discipline (writing); 5 Acquire the overall competencies necessary to success in post-graduate	1 in 2008-2009, students late in the degree did better than students entering the major with some faculty concerns about student knowledge of five specific topics; 2 end-of-program scored well on the assessment with some concerns about “gathering data and presenting it in table or chart form” and “choosing a research topic”; 3 students’ use of graphics is generally relevant, fairly complete, and of acceptable quality; 4 writing is generally relevant; some extraneous

	education (graduate school, et al.) and careers	material and/or key sources missed; organization needs tightening; 5 generally speaking, student perceptions held that the program was providing them with the skills and knowledge needed to be successful in their post-graduation careers
Geology Department	<ol style="list-style-type: none"> <li>1. Students will master a set of fundamental geologic concepts essential to understanding and solving geologic problems</li> <li>2. Students will be proficient in solving geologic problems.</li> <li>3. Students will be proficient in geologic mapping.</li> <li>4. Students will be proficient writers, skilled in the genres of scientific and technical writing</li> </ol>	<p>1 our students on the whole are achieving mastery of geologic problem solving; 2 Overall our program is achieving program goals I-V (see assessment plan) as measured through learning outcomes 1-4; 3 Our students felt underprepared in the use of aerial photos; 5 we need to give students in our introductory classes (Geology 10 and Geology 12) more experiences with rock identification and rock structures</p>
Mathematics and Statistics	<p>What, if any, differences exist between success rates and repeat rates in calculus for the calculus-ready group and the groups of students who are not ready but take either Math 29 or 29A-B?</p> <p>What is the nature of the correlation between success in calculus and score on the CRT or grade in Math 29 or 29A-B?</p>	<p>A real difference (79.8% vs 72.4%) for the students who need and take pre-calculus (Math 29) compared to those students who are calculus ready upon admission, while the Math 29A-B pre-calculus group achieves the highest pass rates.</p> <p>examination of the tables shows a very high correlation between CRT (Calculus readiness test) score and success in Math 30.</p> <p>The students with the best results in calculus (in most categories) are the Math 29A-B students and the worst are the Math 29 students. It is worth noting most of the 29A-B students</p>

continue in cohorts into their calculus classes and typically enroll in the calculus workshop course as well. It is also noteworthy that the calculus success rates for Math 29 students are, in fact, reasonably good by CSU standards, but do offer the greatest potential for improvement among the precalculus groups.

Physics and Astronomy

1 Students should develop a broad understanding of basic principles of physics and mathematics and the foundation for acquiring new knowledge and applying it in a variety of situations; 2 students should develop problem solving, critical thinking and analytical skills and be able to learn new skills as needed; 3 Physics students must be exposed to a broad range of technical skills and should become proficient in many; 4 Students should develop the ability to clearly express their thinking in both oral and written form and to efficiently acquire new information from many sources.

1 Student final exam scores and course grades for Phys 124, 145, 150 and 151 and lab scores and grades for Phys 175 show that nearly all physics majors demonstrated satisfactory levels of physics knowledge by achieving passing grades; All of senior project reports in this sample demonstrated a good knowledge of physics in pursuit of the project aims. 2 The results from both assessments of Analytical Reasoning indicate that Physics majors are meeting this learning goal; 3 The results from assessment of senior project reports indicate that Physics majors are meeting the Technical Skills learning goal. Each of the reports demonstrated effective use of various technical skills to fulfill project goals; 4 The results of assessing Communications Skills through exams and particularly the senior project reports and presentations indicate a significant closing of the gap in levels of achievement for mathematical communication and written communication in reports, relative to our analysis of a year ago. The results of Programmatic

Assessment through the senior exit interviews lend support to our previous results from last year's assessment that overall the Physics major is well structured and does facilitate student achievement in Physics

Table 6 presents information from the College of Social Sciences and Interdisciplinary Studies. According to its website, this College “houses departments committed to a broad range of subjects employing social science and interdisciplinary perspectives and methodologies. [The] primary mission is to enhance... students' abilities to analyze and make informed decisions regarding issues, problems, and policies in the Capital Region, and at the state, national, and global levels.” As a College framed by the notion of interdisciplinarity, several programs cut across a number of departments, e.g., the Social Science major itself as well as the Liberal Studies program. Even within departments that appear to be one discipline, departments house several areas of study, e.g., Anthropology with its branches that reach from biology to linguistics. The challenges of assessment across disciplines are heightened for this College, but the past few years have been productive in terms of assessment organization and collaboration as Table 6 reveals.

Table 6

*College of Social Sciences and Interdisciplinary Studies*

PROGRAM IN  
SOCIAL SCIENCES  
AND  
INTERDISCIPLINARY  
STUDIES

Anthropology	1 We wanted to assess whether or not anthropology majors successfully acquire basic introductory knowledge in the lower-division prerequisite classes (Anth 1, Anth 2, Anth 3, and Anth 4) necessary to successfully complete required upper-division coursework;	Faculty in each of the four sub-disciplines will continue to administer the multiple choice quizzes in required upper-division class work to assess how well majors have achieved the information competency learning objectives in their lower-division courses
	2 Regarding disciplinary competency, we expect all our	2a Archeological anthropology--Although

majors to demonstrate a significant understanding of central aspects of anthropology, including the nature of science as a distinctive form of knowledge and practice, basic evolutionary theory and an understanding of the place of humans in space and time from a biological standpoint, social, cultural, and linguistic processes, ecological and economic adaptations, history, and past and present human diversity

native Sacramento State students score better than transfer students on all but one assessment question, the difference is subtle and may simply reflect the fact that native students took the assessment quiz when they completed Anth 3. Also, there was notable variation between classes, and transfer students scored significantly better than native students on Assessment Question 7. The faculty decided that additional data was needed and to continue to administer a modified quiz during the 09/10 academic year.

2b Biological Anthropology-- Defining 70% as a C- or better, then students must get a 7/10 or better for our criteria to be performing well (not just passing). The overall mean is excellent for both classes and the distribution of grades suggests that few students (n=4 out of 32, 13% for class 1 and n=5 out of 32, 16% for class 2) are getting below a 7/10. The median value for both classes falls at 8 out of 10. However, these sample classes suggest questions 6 and 9 (and perhaps 1 and 10) are troublesome areas we need to work on in advanced (foundational) classes that students do not seem to understand from Anth 1.

2c Linguistic Anthropology--

Questions 3, 4, and 10 are difficult for students. In particular, Question 8 is extremely difficult; upon consultation with the other faculty member who teaches this course, we discovered that our teaching of this concept is inconsistent. We will have further discussion as to whether or not to include it as a main concept or not. Question 3 is a known area of difficulty for students; various tactics are being explored (and implemented) in order to see what works best for teaching this concept (the difference between a phoneme and an allophone). Clearly, these are concepts that require further practice and explanation in both ANTH 160 and 162

2d Socio-Cultural Anthropology--transfer students (on average) demonstrated less competency than native students. Examining the data according to competency per question also provided valuable information. The instructor has used these findings to identify areas of collective weakness (e.g. understanding of hegemony, race as a social fact, and diasporic formation).

Economics

apply both oral and written communication skills within the discipline

In Spring 2009, the mean score on Question 5 (communication skills as

		rated by faculty observation) was 2.22 (compared to 2.17 in Fall 2008), and 89.16 percent met or exceeded expectations (compared to 96.83 in Fall 2008) [NOTE: 2 = meets expectations]. For all questions, the mean was 2.07 with 84.89 percent meeting or exceeding expectation in Spring 2009
Environmental Studies	Statements were provided by the three full-time faculty of the department in spring 2009. They are followed by detailed assessment reports for each course taught	Detailed assessment reports communicate instructor ratings of student performance with respect to a wide variety of course-specific outcomes. Generally, students meet expectations with some areas of concern. Refer to the annual assessment report for details.
Ethnic Studies	The Department did not formally assess any goals or learning objectives/ outcomes in the AY ending June 30, 2009	
Family and Consumer Sciences	awareness of the integration of the different concentrations in FACS and their importance in the relationships between humans and their diverse environments as individuals and groups as a whole	1 64% of the groups demonstrated beginning level insights into their discipline while 34% were at a developing level and demonstrated academic understanding of their discipline. None of the groups achieved an accomplished level in which they would be expected to clearly demonstrate an understanding of their discipline at a more advanced level. [NOTE: It is reasonable to expect that

students would not yet be at an accomplished level in FACS 160 as this is not a senior level class. However, the prerequisite of 15 FACS units suggests that they have some exposure to their field.]

2 The majority of the groups (64%) failed to present an integrated approach in the discussion of their topic. Two of the eleven groups (18%) acknowledged the importance of connecting the disciplines but did not specifically identify points of integration while 18% demonstrated connections and provided examples and theories beyond their own perspective. [NOTE: FACS students are largely not aware of how to integrate and connect their respective disciplines in the discussion of a common issue or topic. This may be due to their relatively novice level grasp of their own discipline or due to the lack of emphasis in the FACS curriculum and related assignments]

Gerontology

Exhibits effective written, oral, and interpersonal communication skills with individuals, caregivers, families, and agency staff

1--Data show that all students met the overall criteria for passing the culminating project and therefore **Learning Outcome #8** at a “mostly or highly competent” level

2--Data show that Presentation scores were about the same both semesters. With 10/11

presentations being at or above the “mostly competent level”, expectations were clearly achieved.

All students met the overall minimal criteria for passing this presentation

3--All four (4) students were rated at the “highly competent” level by their Field Supervisors in almost all assessed areas. This more than meets the overall criteria for passing this internship and

demonstrating the **Learning Outcome #8**. Written examples by Field Supervisors and faculty members on student evaluations also elaborated the student’s abilities and skills at this level

4--all students completed the Student Self Evaluation and “met” the required criteria that demonstrated skills and communication abilities in order to pass the course.

Government

The ability to write clearly, develop a thesis, apply and compare theory, and provide empirical evidence for claims is an essential part of what the Government Department expects from a qualified graduate of our program.

1--Overall Government majors demonstrate the ability to successfully engage the subject matter and assignments presented to them. Their genuine interest in the subject matter is demonstrated in both their writing and their in-class participation. As in previous assessments we continue to see strengths in their information acquisition and application of evidence. In this year’s assessment we also found that they are

Liberal Studies

Students will develop effective written communication skills.

strong in conceptual thinking when it is separately evaluated from theoretical analysis

2--While there is room for improvement in all areas, where Government majors continue to need improvement is in the analysis of relationships and theories. In this assessment we found our students to be best able to perform this task when it was an explicit part of the assignment. They faltered when they had to demonstrate this ability in the context of a broader written assignment. This is an important finding as it allows us, as a faculty, to think about how to better integrate theoretical analysis into our students' overall repertoire of skills, particularly when that is not an explicit part of the assignment

1--All areas of writing were found to be at a high level during this evaluation. It was found that Liberal Studies students are highly competent in tailoring writing to a specific audience. 76% of the student scores were at or above the median score of the rubric (3) in this area. The highest area of evaluation was on "focus writing on a specific purpose." Student writing reflects that 94% of the samples were scored above the median score of

3. The ability to produce logical, coherent, and well structured writing was also a relatively high score with 88% of students scoring a 3 or above. Finally the ability to apply appropriate writing standards found 76% of students scoring 3 or above. 2--The two lowest areas are “tailoring writing to a specific audience,” and “apply appropriate writing standards.” These two areas of writing were still scored at a 76% passage rate of a score at least 3 or above. Since the passage rate for the Writing Proficiency Exam (WPE) average 70% for the first time test taker passage and the SSIS scores are 76% for native students and 72% for transfer students, the passage rate on the various aspect of this signature assignment or equal to or higher than the WPE scores for the college and higher than the university as a whole. While these scores are not equivalent to the WPE scores, the current area of assessment and the WPE can give an overall view of the effectiveness of writing among Liberal Studies majors.

Psychology

To teach students about diversity so that they can appreciate the differences, flexibly analyze situations, and to be mindful of equity

Psychology 100 students averaged 42% correct on the pretest and 80% correct on the posttest. Psychology 135 students averaged 41% on the pretest and 72%

		<p>correct on the posttest. Based on statistical analysis it was concluded that these results were statistically significant and the percentage differences constituted large effects. It was concluded that overall the Department's objective of having students learn about and appreciate ethnic diversity was met.</p>
<p>Public Policy and Administration</p>	<p>Critical thinking; integrative thinking; effective communication for policy audiences; understanding professional role; practical applications;</p>	<p>To achieve an overall summary of these results it is perhaps most informative to examine the summative tables available in Table 3 in the appendix that appear at the end of the fall 2008 and spring 2009 results. The overall average for the fall of 2008 was 4.01. While in the spring of 2009 it was 3.94. This puts the PPA Department's achievement of learning objectives on average in the "very well" category.</p>
<p>Social Science</p>	<p>These integrative and interdisciplinary objectives/outcomes called "literacy strands," which are identified as: Historical Literacy, Ethical Literacy, Cultural Literacy, Geographic Literacy, Economic Literacy, and Sociopolitical Literacy.</p>	<p>Counting the scores of all 16 students who completed their portfolios in spring 2009, the average quantitative scores for samples of work, or artifacts, for World Perspective, National Perspective, State Perspective, Citizen's Perspective, Principles of Geography and Principles of Economics were all higher than the scores from the year before. In particular, average scores from Geography improved to 8.4 in 2009 compared to 7.2 in 2008.</p>

Similarly, the average scores for the artifacts in Economics improved to 7.1 in 2009 compared to just 6.4 in 2008. More importantly, the average scores for student analysis papers improved in all areas between 2007-08 and 2008-09. The average quantitative score of analysis papers from Geography increased to 7.9 in 2009, an increase from an average score of 6.3 in 2008. The average Economics analysis scores increased to 7.6 in 2009, up from 6.6 in 2008.

Sociology

2--The sociology major at CSU Sacramento will be expected to study, review, and reflect on the role of theory in sociology.

10--The sociology major at CSU Sacramento will be expected to think critically.

Learning objective 2 was assessed, with an 88% passing rate for our students in the last year. (Learning objective 10 not assessed directly because of difficulty with operationalizing the concepts to do so.)

Learning objective 10 was assessed indirectly, with a 100% success rate of our students feeling they developed critical thinking skills. (Learning objective 2 was not assessed through this means because too general and vague because too difficult to operationalize to gain an adequate measurement of it through indirect means.)

Women's Studies

Students who graduate with a baccalaureate degree in Women's Studies will

Women's Studies Majors are generally Highly Competent (average

demonstrate strong critical analytical skills and can effectively engage in and contribute to debates on complex issues and problems

70%) or Mostly Competent (30%) in Critical Analysis and investigation of issues; developing strong arguments that contribute to on-going debates within Women's Studies; and reveal strong evidence of the complex ways gender intersects with the politics of race, class and culture. Women's Studies Majors are also Highly Competent (70%) or Mostly Competent (30%) in evaluating a range of feminist theoretical texts, effectively engaging in debates regarding them and clearly establishing connections between them. The assessment revealed that students are also Highly Competent (60%), and Mostly Competent (40%) in effectively organizing their material, and communicating their arguments cohesively, with a clear central purpose.

Although most students reveal competence in critical analysis, independent research, and developing feminist perspectives, there is a slight gap between interpretation of theory and its practical implications. This is evident in the lack of balance between students' examination of feminist theory on the one hand, and the development of their own independent research on a socio-political, economic or cultural group/institution on the other hand. A few

students (roughly 30%), focus either too heavily on developing their own individual research projects or developing feminist perspectives without fully examining their implications on particular research topic.

Although most students have attained competency in Written Communication, they could benefit from attending writing workshops focused on improving critical thinking and interpretation skills, strategies for developing arguments based on feminist theory, and organization and development of cohesive written papers.

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Information was not available from the College of Education at the time of this writing.

Information regarding what learning outcomes assessed and findings with respect to those outcomes was further analyzed according to “type of outcome” to determine whether any general claims about student performance at this institution could be made. The following tables summarize this information for four learning outcomes: oral and written communication, quantitative reasoning, ethical dispositions, and thinking skills.

Table 7 provides information with respect to communication as a student learning outcome. Because assessment methods and definitions of the construct “communication” vary considerably across departments, it is difficult to draw any general conclusions from the findings. However, the presence of so many programs with a focus on communication suggests that the campus has useful experience in this area that could be tapped for the development of a common assessment strategy.

Table 7

*Oral and Written Communication*

PROGRAM	LEARNING OUTCOME	CLAIMS ABOUT
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		OUTCOME
Bachelor of Science in Business Administration	<b>Written Communication:</b> Write informational, analytical, and technical documents, which are organized, precise, and relevant.	Did not meeting criteria of 70% or more of students achieving greater than 2.5 out of 4 on measurement instrument
Biological Sciences	Scientific writing skills [Logical progression of ideas (cause/effect), appropriate use of scientific terminology, clear presentation of scientific concept)	Scientific writing skills [Logical progression of ideas (cause/effect), appropriate use of scientific terminology, clear presentation of scientific concept)
Chemistry	Oral and written communication skills in Chemistry	Examination of the Capstone poster project results shows that in all classes considered, students are meeting the learning objectives defined by the department
Civil Engineering	communicate effectively	target met by senior survey data
Computer Engineering	oral communication; written presentation	Generally did well in organization, language and vocabulary, and technical content. Improvement is needed in specific areas of delineating the presentation into introduction, body, and conclusion, maintaining eye contact, and identifying of related work; structure of the composition, paragraphing, and conclusion were areas of need
Criminal Justice	Writing (1 organization, 2 grammar)	Organization is coherent but simplistic sequencing of events and may have minor digressions; topic sentences and conclusions not present; 2 Writing reflects adequate control of syntax, sentence variety, word choice, and conventions of Standard

Division of Social Work (Undergraduate)	Use relationship and communication skills to establish facilitative conditions for professional relationships.	English. Errors do not slow the reader or impede understanding for the reader in a serious way Target not met (need improvement in understanding of group dynamics and applying this understanding in working with groups. Groups may be task-oriented, therapeutic, or psycho-educational)
Economics	apply both oral and written communication skills within the discipline	In Spring 2009, the mean score on Question 5 (communication skills as rated by faculty observation) was 2.22 (compared to 2.17 in Fall 2008), and 89.16 percent met or exceeded expectations (compared to 96.83 in Fall 2008) [NOTE: 2 = meets expectations]
English	present scholarly and creative productions to a large audience on student conference day	Students generally performed well
French	speaking and listening in French	improvement in task completion, language control, comprehensibility of message, all areas in oral presentation except fluency; concern with students' fluency and use of a wide vocabulary when speaking in spontaneous situations
Geography	Analyze and evaluate scholarly writing within the discipline (writing)	Writing is generally relevant; some extraneous material and/or key sources missed; organization needs tightening
Geology	Students will be proficient writers, skilled in the genres	Overall our program is achieving program goals I-

Gerontology	<p>of scientific and technical writing</p> <p>Exhibits effective written, oral, and interpersonal communication skills with individuals, caregivers, families, and agency staff</p>	<p>V (see assessment plan) as measured through learning outcomes</p> <p>1--Data show that all students met the overall criteria for passing the culminating project and therefore <b>Learning Outcome #8</b> at a “mostly or highly competent” level</p> <p>2--Data show that Presentation scores were about the same both semesters. With 10/11 presentations being at or above the “mostly competent level”, expectations were clearly achieved.</p> <p>All students met the overall minimal criteria for passing this presentation</p> <p>3--All four (4) students were rated at the “highly competent” level by their Field Supervisors in almost all assessed areas. This more than meets the overall criteria for passing this internship and demonstrating the <b>Learning Outcome #8</b>.</p>
Government	<p>The ability to write clearly, develop a thesis, apply and compare theory, and provide empirical evidence for claims is an essential part of what the Government Department expects from a qualified graduate of our program</p>	<p>1--Overall Government majors demonstrate the ability to successfully engage the subject matter and assignments presented to them. Their genuine interest in the subject matter is demonstrated in both their writing and their in-class participation. As in previous assessments we continue to see strengths in their information acquisition and</p>

		<p>application of evidence. In this year's assessment we also found that they are strong in conceptual thinking when it is separately evaluated from theoretical analysis</p> <p>2--While there is room for improvement in all areas, where Government majors continue to need improvement is in the analysis of relationships and theories. In this assessment we found our students to be best able to perform this task when it was an explicit part of the assignment. They faltered when they had to demonstrate this ability in the context of a broader written assignment. This is an important finding as it allows us, as a faculty, to think about how to better integrate theoretical analysis into our students' overall repertoire of skills, particularly when that is not an explicit part of the assignment</p>
Graphic Design	<p>understand history and trends, produce professional-quality work, <b>communicate</b>, control visual media</p>	<p>students improved in problem-solution, communication, producing projects; not so well in idea development, sketching, mock-up</p>
History	<p>write a clear expository essay that develops a coherent historical argument and marshal evidence to support an interpretation;</p>	<p>greatest improvement in their ability to read primary and secondary sources as well as use of appropriate citation standards;</p>

	reading skills of primary and secondary historical sources; use citation standards appropriate to the discipline of history ( <i>Chicago Manual of Style</i> ).	improvement in writing skills but department faculty should place greater emphasis on forming arguments and developing grammar skills in upper division courses.
Humanities and Religious Studies	writing an effective research paper	research writing assignment was revised to give more opportunity for students to engage in synthesis
Interior Design	understand history and trends, produce professional-quality work, <b>communicate</b> , control visual media	students meet expectations in applying knowledge of design history to their work; 50% prepared to enter the profession; 50% revealed some or significant weaknesses
Learning Skills Writing	incorporating written source material into students' own expository writing in ways that lead to success in credit-bearing GE classes	Comparison of students who used the "chart method" during writing tests with students who did not showed that the chart method supported students in using more of their own ideas, avoiding plagiarism, and using more paraphrases rather than direct quotations
Liberal Studies	Students will develop effective written communication skills	1--All areas of writing were found to be at a high level during this evaluation. It was found that Liberal Studies students are highly competent in tailoring writing to a specific audience. 76% of the student scores were at or above the median score of the rubric (3) in this area. The highest area of evaluation was on "focus writing on a specific purpose." Student writing reflects that 94% of the samples were scored above

Philosophy

state the precise issue in writing; produce relevant arguments for (or against) one side of the precise issue in writing; state unexpressed premises and

the median score of 3. The ability to produce logical, coherent, and well structured writing was also a relatively high score with 88% of students scoring a 3 or above. Finally the ability to apply appropriate writing standards found 76% of students scoring 3 or above. 2--The two lowest areas are "tailoring writing to a specific audience," and "apply appropriate writing standards." These two areas of writing were still scored at a 76% passage rate of a score at least 3 or above. Since the passage rate for the Writing Proficiency Exam (WPE) average 70% for the first time test taker passage and the SSIS scores are 76% for native students and 72% for transfer students, the passage rate on the various aspect of this signature assignment or equal to or higher than the WPE scores for the college and higher than the university as a whole. While these scores are not equivalent to the WPE scores, the current area of assessment and the WPE can give an overall view of the effectiveness of writing among Liberal Studies majors. There were no significant differences in student performance on the assessments from last year or from previous years.

	assumptions explicitly; evaluate premises and assumptions; distinguish correctly among closely-resembling claims; determine whether an argument is valid – and if not why not	
Physics and Astronomy	Students should develop the ability to clearly express their thinking in both oral and written form	The results of assessing Communications Skills through exams and particularly the senior project reports and presentations indicate a significant closing of the gap in levels of achievement for mathematical communication and written communication in reports, relative to our analysis of a year ago.
Public Policy and Administration	effective communication for policy audiences	The PPA Department’s achievement of learning objectives on average in the “very well” category.
Spanish	communicate effectively in written language under testing conditions	Most students are obtaining a good or excellent score (80 or above), but some students still struggle with writing assignments in their senior year (conventions, developing a thesis are problem areas)
Women’s Studies	effectively engage in and contribute to debates on complex issues and problems	Most students have attained competency in Written Communication, they could benefit from attending writing workshops focused on improving critical thinking and interpretation skills, strategies for developing arguments based on feminist theory, and organization and

development of cohesive written papers.

Table 8 provides information about assessment with regard to quantitative reasoning.

Table 8

<p><i>Quantitative Reasoning</i> Bachelor of Science in Business Administration</p>	<p><b>Quantitative Analyses:</b> Understand when, why, and how to use quantitative analyses including statistical models and mathematical techniques for areas such as accounting, finance, human resource, operations, and/or marketing.</p>	<p>Did not meeting criteria of 70% or more of students achieving greater than 2.5 out of 4 on measurement instrument</p>
<p>Department of Geography</p>	<p>Demonstrate competency in one or more of the basic geographic tools/techniques for data collection, display, and analysis.</p>	<p>End-of-program scored well on the assessment with some concerns about “gathering data and presenting it in table or chart form” and “choosing a research topic”;</p>
<p>Learning Skills Math</p>	<p>elementary algebra and geometry needed to succeed in GE level math class</p>	<p>Students need more measurement geometry and applied graphing.; also, they need a continued focus on applied algebra skills.</p>
<p>Mathematics and Statistics</p>	<p>What, if any, differences exist between success rates and repeat rates in calculus for the calculus-ready group and the groups of students who are not ready but take either Math 29 or 29A-B? What is the nature of the correlation between success in calculus and score on the CRT or grade in Math 29 or 29A-B?</p>	<p>A real difference (79.8% vs 72.4%) for the students who need and take pre-calculus (Math 29) compared to those students who are calculus ready upon admission, while the Math 29A-B pre-calculus group achieves the highest pass rates.  examination of the tables shows a very high correlation between CRT (Calculus readiness test) score and success in Math 30.</p>

Physics and Astronomy	Physics students must be exposed to a broad range of technical skills and should become proficient in many	<p>The students with the best results in calculus (in most categories) are the Math 29A-B students and the worst are the Math 29 students. It is worth noting most of the 29A-B students continue in cohorts into their calculus classes and typically enroll in the calculus workshop course as well. It is also noteworthy that the calculus success rates for Math 29 students are, in fact, reasonably good by CSU standards, but do offer the greatest potential for improvement among the precalculus groups.</p> <p>The results from assessment of senior project reports indicate that Physics majors are meeting the Technical Skills learning goal. Each of the reports demonstrated effective use of various technical skills to fulfill project goals</p>
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Table 9 provides information about assessment with respect to ethical dispositions.

Table 9

*Ethical Dispositions*

Bachelor of Science in Business Administration	<b>Ethical Decision:</b> Make ethical decisions to achieve personal and organizational responsibilities in business context	Did not meeting criteria of 70% or more of students achieving greater than 2.5 out of 4 on measurement instrument
Civil Engineering	understanding of professional and ethical responsibility	Faculty consider the target met by data from senior survey and results from a major writing assignment on ethics
Division of Social Work	Internalize professional values and ethics of NASW's Code	Target met

Electrical and Electronic Engineering	of Ethics and the principles for ethical decision making understanding of ethical and professional responsibility and becoming “life-long” learners	Faculty view this objective as more important than industry advisors view it, but neither group sees it as critical
Masters of Business Administration	<b>Ethical Decision:</b> Make ethical decisions to achieve personal and organizational responsibilities in business context.	Did not meet criteria of 70% or more of students achieving greater than 2.5 out of 4 on measurement instrument
Public Policy and Administration	understanding professional role	PPA Department’s achievement of learning objectives on average in the “very well” category.
Social Science	Ethical Literacy	The average Economics analysis scores increased to 7.6 in 2009, up from 6.6 in 2008.

Table 10 provides information about assessment with respect to thinking skills.

Table 10

Thinking Skills

PROGRAM	LEARNING OUTCOME	CLAIMS ABOUT LEARNING OUTCOME
Bachelor of Science in Business Administration	<b>Analytical Process:</b> Solve a managerial problem by identifying the factors contributing to the problem, formulating alternative solutions, evaluating the pros and cons, conducting cost and benefit analyses of alternative solutions, and selecting a solution.	Did not meeting criteria of 70% or more of students achieving greater than 2.5 out of 4 on measurement instrument
Civil Engineering	identify, formulate, and solve engineering problems	Target met by data from senior survey and EBI survey and by ratings given to senior project proposals by practicing engineers (not faculty)
Computer Engineering	Identify, formulate, and solve engineering problems	faculty strongly disagree with the target’s

Criminal Justice	critical thinking (analysis, synthesis, evaluation)	achievement while advisors strongly agree it has been met, alumni in the middle writing reflects logical analysis and ability to see obvious linkages and parts but is limited and narrow in context; writing reflects few new ideas generated from information presented in assignment, or new ideas that are not logical or innovative. Few, if any, generalizations; Writer shows some ability to be able to compare and discriminate between some facts and theories presented in the assignment and recognize subjectivity. Writer demonstrates some difficulty in reasoning when making arguments based on the information provided in the assignment.
Department of Chemistry	Laboratory knowledge and utilizing skills (chemical principles and facts)	Examination of the standardized ACS test results shows that the Chemistry Department compares favorably compared to the national average. This suggests that both our lower division and upper division courses are effectively meeting the learning objectives
Division of Social Work	Apply critical thinking skills to question, understand, and analyze phenomena in the context in which they occur	Target met
Electrical and Electronic Engineering	1.) solve complex design problems	1.) most advisors and faculty agree this is critical or important while a minority of both faculty and advisors rate this objective

Family and Consumer Sciences	the integration of the different concentrations in FACS and their importance in the relationships between humans and their diverse environments as individuals and groups as a whole	as less important None of the groups achieved an accomplished level in which they would be expected to clearly demonstrate an understanding of their discipline at a more advanced level.
Government	apply and compare theory, and provide empirical evidence for claims	Government majors continue to need improvement is in the analysis of relationships and theories
Geology	be proficient in solving geologic problems and geological mapping	Overall our program is achieving program goals I-V (see assessment plan) as measured through learning outcomes 1-4; Our students felt underprepared in the use of aerial photos
Graphic Design	understand history and trends, produce professional-quality work	students improved in problem-solution; not so well in idea development
History	develop a coherent historical argument and marshal evidence to support an interpretation	department faculty should place greater emphasis on forming arguments
Interior Design	understand history and trends, produce professional-quality work	students meet expectations in applying knowledge of design history to their work
Learning Skills Writing	incorporating written source material into students' own expository writing in ways that lead to success in credit-bearing GE classes	Comparison of students who used the "chart method" during writing tests with students who did not showed that the chart method supported students in using more of their own ideas, avoiding plagiarism, and using more paraphrases rather than direct quotations
Philosophy	produce relevant arguments for (or against) one side of	There were no significant differences in student

	the precise issue; evaluate premises and assumptions; distinguish correctly among closely-resembling claims; determine whether an argument is valid – and if not why not	performance on the assessments from last year or from previous years.
Photography	create professional quality work	students have improved in creative thinking, development of clearly articulated concepts
Physical Therapy	Demonstrate Professional Competence; evaluation of an individual with a neurological disorder from a case study or actual patient contact	The review revealed that our graduates continue to struggle with meeting community standards in this critical area
Physics and Astronomy	students should develop problem solving, critical thinking and analytical skills and be able to learn new skills as needed	The results from both assessments of Analytical Reasoning indicate that Physics majors are meeting this learning goal
Psychology	flexibly analyze situations and be mindful of equity	It was concluded that overall the Department’s objective of having students learn about and appreciate ethnic diversity was met.
Public Policy and Administration	Critical thinking; integrative thinking.	PPA Department’s achievement of learning objectives on average in the “very well” category.
Sociology	Critical thinking; expected to study, review and reflect on the role of theory in sociology.	100% of students assessed themselves as having critical thinking skills; however, the faculty assessed the students at 88%.
Theater and Dance	apply and integrate their knowledge of multiple areas of theatre and/or dance (i.e. ballet, jazz, choreography, acting, designing, stage managing, dramatic criticism, theatre/Dance history, performance analysis, etc.)	Great improvement in students’ ability to apply and integrate their acquired knowledge because of curriculum revisions and advising that enabled students to receive instruction at their level of development.

to coursework, production, and their desired career goals.

Women's Studies

demonstrate strong critical analytical skills to effectively engage in and contribute to debates, complex issues, and problems

Women's Studies Majors are generally Highly Competent (average 70%) or Mostly Competent (30%) in Critical Analysis and investigation of issues; developing strong arguments that contribute to on-going debates within Women's Studies

## SECTION TWO: DISCUSSION OF THE FINDINGS

The 2008-09 summary of Sacramento State's annual assessment reports documents that faculty across most of the university are engaged in serious assessment of a variety of learning outcomes of importance to them and to their students. It also documents that faculty are doing these assessments not simply to prove to the external world that students are in fact learning something; indeed, the evidence shows that faculty are also looking at findings to determine where and how efforts at improvement should be undertaken. The positive impact of the college deans on the quality of assessment activities is apparent, especially in those colleges that have little historical experience with external accrediting agencies. This year's reports bolster the argument that enlisting the deans in assessment work will have a long-range impact on both the quantity and quality of assessment initiatives.

The analysis of findings and claims presented in Tables 7, 8, 9, and 10, which are the places where assessment of shared outcomes across departments and colleges is presented, is good news for the campus. Clearly, assessment of written and oral communication received attention in almost every college in one way or another, suggesting that a considerable number of faculty are already invested in this sort of work, find it useful and meaningful, and have some sense of how to go about doing it. Given that the institution just recently changed its way of certifying writing competence among undergraduates, faculty experiences in this domain will be very helpful to the Senate subcommittee on Reading and Writing as it goes about the development of a Board to set policies for the implementation of the Writing Intensive courses as a means for satisfying the Graduate Writing Assessment Requirement (GWAR).

In keeping with the spirit of the recent memorandum from the Chancellor's Office that points to the AAC&U's VALUE Project with its associated meta-rubrics as a conceptual framework for organizing assessment in General Education, the fact that the annual reports can be categorized at all according to common learning outcomes is positive. As the various groups and task forces focused on the redesign of General Education do their work, Tables 1-6 could be analyzed by the group members multiple times through the lens of any one of the 15 VALUE rubrics to

determine where faculty have experience and expertise and thereby to organize faculty into collaborative groups for the design of common assessments.

In order for Sacramento State to move to the next level of development in terms of assessment, it will be necessary for larger, more global outcomes of the sort the LEAP Framework articulates to be adopted across the programs. Such a framework will allow programs the opportunity to indicate which of the global outcomes it assesses regularly, and findings from all of the programs that assess these outcomes can be aggregated. Faculty from across the colleges will be positioned to exchange insights about assessments as well as assessment methodologies, in turn making the assessment enterprise more meaningful and efficient. The use of electronic data collection, analysis, and management tools will simplify this work.

## APPENDIX

Table 11

College of Art and Letters Grades and Term (Fall/Spring) GPA by Level 2008-2009

	Lower Division	Upper Division	Graduate
Art	2.90/2.92	3.20/3.24	3.97/3.92
Communication Studies	2.71/2.66	2.90/2.91	3.57/3.78
Design	3.02/2.97	3.07/3.09	NA/NA
English	2.81/2.78	3.17/3.20	3.61/3.64
Foreign Languages	3.19/3.39	3.15/3.15	3.72
History	2.56/2.44	2.72/2.77	3.69/3.65
Humanities & Religious Studies	2.65/2.40	2.82/2.86	3.75/3.72
Learning Skills	NA/NA	NA/NA	NA/NA
Music	2.76/2.70	3.45/3.35	3.80/3.70
Philosophy	2.46/2.43	2.75/2.63	NA/NA
Theatre & Dance	3.33/3.22	3.40/3.48	4.00/4.00

Table 12

College of Business Administration Grades and Term (Fall/Spring) GPA by Level 2008-2009

	Lower Division	Upper Division	Graduate
Business	2.61/2.55	2.86/2.86	3.57/3.55

Table 13

College of Education Grades and Term (Fall/Spring) by Level 2008-2009

	Lower Division	Upper Division	Graduate
Bilingual/Multicultural Education	3.71/NA	3.78/3.77	3.89/3.81
Child Development	2.71/2.85	3.25/3.16	3.56/3.78
Counselor Education	NA/NA	3.84/3.83	3.81/3.82
Ed.Leadership & Policy Studies	NA/NA	NA/NA	3.85/3.90
Special Ed., Rehab.,Sch Psyc	NA/NA	3.26/3.38	3.76/3.74
Teacher Education	3.33/3.15	3.72/3.68	3.87/3.92

Table 14

College of Engineering and Computer Science Grades and Term (Fall/Spring) GPA by Level 2008-2009

	Lower Division	Upper Division	Graduate
Civil Engineering	2.62/2.34	2.72/2.74	3.60/3.44
Computer Science	2.92/3.06	2.81/2.83	3.34/3.48
Electrical & Electronic Engineering	2.59/2.95	2.97/2.88	3.36/3.40
Mechanical Engineering	3.24/3.30	3.00/3.17	3.43/3.56

Table 15

College of Health & Human Services Grades and Term (Fall/Spring) GPA by Level  
2008-2009

	Lower Division	Upper Division	Graduate
Criminal Justice	2.41/2.29	2.74/2.81	3.71/3.72
Kinesiology	3.58/3.58	3.21/3.14	3.20/3.52
Nursing	3.58/3.40	3.56/3.47	3.75/3.93
Physical Therapy	NA/NA	3.06/NA	3.74/3.72
Recreation, Parks & Tourism Administration	2.98/3.00	3.42/3.30	3.39/3.51
Social Work	3.65/2.87	3.37/3.40	3.69/3.77
Speech Pathology & Audiology	2.96/NA	3.45/3.45	3.79/3.96

Table 16

College of Natural Sciences & Mathematics Grades and Term (Fall/Spring) GPA by Level 2008-2009

	Lower Division	Upper Division	Graduate
Biological Sciences	2.24/2.26	2.56/2.65	3.72/3.82
Chemistry	2.04/1.93	2.72/2.64	3.07/2.98
Geography	2.42/2.12	2.57/2.52	NA/4.00
Geology	2.63/2.69	2.89/2.63	3.14/3.61
Mathematics	2.30/2.27	2.55/2.55	2.69/2.58
Physics & Astronomy	2.26/2.35	2.83/2.87	NA/NA

Table 17

College of Social Sciences & Interdisciplinary Studies Grades and Term (Fall/Spring)  
GPA by Level 2008-2009

	Lower Division	Upper Division	Graduate
Anthropology	2.62/2.51	2.84/2.73	3.92/3.31
Economics	2.39/2.26	2.77/2.60	3.23/NA
Environmental Studies	2.91/2.82	3.02/3.13	NA/NA
Ethnic Studies	2.66/2.62	3.18/3.03	NA/NA
Family & Consumer Sciences	2.89/2.63	2.97/3.08	4.00/3.91
Gerontology	2.36/NA	3.43/3.38	NA/NA
Government	2.42/2.46	2.61/2.62	3.55/3.74
Liberal Studies	NA/NA	2.74/3.35	NA/NA
Psychology	2.18/2.31	2.76/2.74	3.69/3.77
Public Policy & Administration	NA/NA	NA/3.32	3.46/3.46
Social Science	NA/NA	NA/3.94	NA/NA
Sociology	2.94/2.89	2.90/2.80	3.60/3.54
Women's Studies	NA/NA	3.02/3.16	NA/NA