

Program Review External Consultant Report

Learning Skills Center, California State University, Sacramento

May 2007

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I. INTRODUCTION

This report constitutes the findings of my evaluation of the Mathematics area of the Learning Skills Center at California State University, Sacramento on May 10-11, 2007. It reflects my observations and recommendations after interviews and careful review of the Learning Skills Center's self-study, the CSUS catalog, mathematics course syllabi, faculty curricula vitae, and data related to retention and graduation. During my campus visitation, interviews were conducted with Learning Skills Center Chair, Roberta Ching; Mathematics Coordinator, Stan Barrick; Mathematics Course Supervisors, Ann Katz, Pam Fredenburg, and Leslie McCurry; some Mathematics Learning Skills Center instructors and student assistants; and Learning Skills Center Administrative Assistants, Lori Lum and Kim Dinnen. Interviews were also conducted with Mike Lee, Associate Vice President and Dean of Academic Programs for Academic Affairs; Jeff Mason, Dean of the College of Arts and Letters; Doraiswamy Rmachandra, Associate Dean for Natural Science and Mathematics; Jerry Blake, Acting Director of EOP; Leticia Perez, Summer Bridge Program; Laurie Dahlberg, Student Athlete Resource Center; and Mary Jane Lee, Greg Kim-Ju, Sherrie Hembree, the Sacramento State Review Team. I did not have the opportunity to meet with Sue McKee, Reading and Writing Coordinator in the Learning Skills Center.

Throughout my visitation, all information was readily available or supplied when requested, and meetings were very cordial. Please accept my gratitude for the wonderful hospitality shown over the two days.

II. OBSERVATIONS OF STRENGTHS AND WEAKNESSES OF THE LEARNING SKILLS CENTER PROGRAM

With nearly 65% of incoming freshmen students required to complete some remediation within their first year of enrollment, the Learning Skills Center fills a critical need on the Sacramento State University campus. The recurrent theme echoed throughout my two days was that the Learning Skills Center is a valuable and valued department. Its programs not only afford underprepared students the opportunity to develop necessary skills to be successful in

mathematics, reading, and writing, but through these programs students develop the study skills and critical thinking skills that allow them to succeed in all areas, thus influencing retention and graduation rates. It appears the administration is fully aware of the enormous respect the Learning Skills department deservedly enjoys.

The Learning Skills Center is led by Robbie Ching, Chair; Math Coordinator, Stan Barrick; and Reading and Writing Coordinator, Sue McKee, a small but very effective team of leaders for this department. They have been at the forefront in creation of programs to address the issues of, and reduce the need for, remediation within the CSU. They are industriously engaged in a variety of projects that provide service to the university, especially those related to preparation of incoming students. Among them, they have been instrumental in development of the CSU Math Success website, an online mathematics preparation course for high school seniors, curricula for senior year high school English courses, as well as involved in creation of partnerships with local community colleges to offer students an opportunity to fulfill the EAP conditional math exemption to the ELM.

The Learning Skills math faculty is a highly dedicated and enthusiastic group. They approach their job with great passion and appreciation of the specialized nature and challenge of teaching underprepared students. The math program receives strong leadership from the math program coordinator and the course coordinators, who meet regularly to discuss curricular, assessment, and personnel issues. Course materials and syllabi are standardized and shared to ensure quality and consistency of curriculum, pedagogy, and evaluation procedures in courses. They have developed scoring rubrics for exams, and hold sessions for new instructors to standardize the evaluation process across courses. Course coordinators and instructors collaborate with each other, as well as "share" office hours with students unable to meet with their own instructor. This is important to their students, as a large number of instructors are part-time lecturers and office space is limited and varied in location. Course coordinators also provide intense support and mentoring to student instructors.

It is evident the Learning Skills faculty fully understands their mission and strives to meet their goal of providing the highest quality of teaching to underprepared students. Regular collaboration occurs, as they share effective teaching strategies and focus on teaching problem solving and logical thinking skills, the skills students will use across disciplines and in the workplace. Their faculty has authored curricular materials for some LS courses. New and innovative courses materials are continuously assessed and then piloted in small groups as appropriate. Faculty collaborates regularly other academic units on campus, including EOP, Summer Bridge, CAMP, and the Writing Across the Curriculum Program.

The Learning Skills Center has very successfully addressed recommendations made in the last program review. Major program changes occurred subsequent to the hiring of Dr. Barrick. Curricular changes that addressed teaching strategies, pedagogy, and student learning diversity were implemented, which have resulted in increasing pass rates and student satisfaction. Dr. Barrick developed a procedure to recruit qualified math tutors, a program which has also benefited prospective mathematics teachers by providing them valuable experience. He also worked with the Math Department to find a workable resolution to the intermediate

algebra/remedial mathematics sequence issue, all of which has moved the Learning Skills Center to serve students more effectively.

The Learning Skills Center office staff does an outstanding job of handling front line action in a very busy office. Although the office staff has decreased by one position within the last year, they have continued to provide support to both students and faculty, while maintaining a positive environment and a well-organized office. Coordinators, faculty, and staff share an excellent working relationship. As a satellite to the EO 665 office, they understand the important role the department plays in the process to properly place, track, and support students through successful completion of remedial coursework within their first year. I also noted a concern expressed by both the staff and program administrators several times, that due to the conversion from SIS+ to PeopleSoft, during the registration period students are no longer required to enroll in remedial courses before enrolling in their other courses. They believe identifying and tracking students who do not enroll in or who drop remedial courses will be an issue.

The hub of Lassen Hall is a good location for the Learning Skills Center, as it is central to other programs and services these students use. Office space is definitely an issue, especially during the fall semester. Several instructors share office space, which makes it difficult to advise and confer with students privately. Classrooms are quite crowded when class is at capacity, which limits the instructor's ability to work with individuals or small groups. Some classrooms did not appear to be ADA compliant.

As reported in the self-study, class size for LS 7A and LS 10A has grown dramatically due to budget pressures. Success in Learning Skills courses hinges on a close interaction between instructors, tutors and students. In larger classes, with limited instructor-student contact, fewer student assistants, and crowded classrooms, it is likely success rates will continue to be affected. Increased class size has already effected changes in pedagogy, classroom dynamics, and led to an increase in course repeats.

The technology used in the Learning Skills math courses appears to be appropriate. Students are able to self-select between a lecture or multi-media methodology (ALEKS) in LS 10A. Math Zone was used for homework assignments in some LS classes, although I understand it has been replaced by ALEKS due to some memory problems with Math Zone. As additional classes implement computerized homework assignments another computer lab may be needed.

EOP, the Summer Bridge Program and the Student Athlete Resource Center all report an excellent working relationship with the Learning Skills Center. EOP places students into learning communities based on EPT scores, and values the participation of Learning Skills instructors in learning community meetings to discuss student progress. (Since learning communities typically have students enrolled in a variety of math courses, it is difficult for math instructor to participate at the same level as writing program instructors.) The Learning Skills Center hires the instructors and student tutors for the Summer Bridge Program, which reports great satisfaction with the caring instructors and tutors they employ. The Student Athlete Resource Center reports Learning Skills is "awesome" and has been extremely helpful and accommodating in working with student athletes.

Math majors preparing to enter a masters degree or credential program are provided an excellent opportunity to gain valuable experience working in the Learning Skills Center. Dr. Barrick carefully screens and hires these students to work as tutors and student assistants in facilitating the tutor lab hours associated with LS 7A and 7B. These tutors and student assistants often go on to become student instructors in LS 10A. They gain valuable tutoring and teaching experience and are ultimately rewarded with recommendations from the Learning Skills faculty as they complete their program. These new teachers are reportedly in high demand by mathematics departments in local secondary schools and community colleges. Several of the current Learning Skills math faculty worked through this program while earning their degrees.

Some coordination between Learning Skills and the Math Department exists, but it appears to be at a minimum. Dr. Barrick attends Math Department curriculum meetings, and there is coordination of the sequencing out of LS courses and into Math courses. Currently, students must pass the Elementary Geometry Algebra Diagnostic exam to complete LS 7B or LS 10A, which satisfies the prerequisite to Math 1 and Math 9. Students who score 44-48 on the ELM exam concurrently enroll in Math 9 and LS 10X. However, because these two courses are not linked for credit, it can be confusing for students who may pass one but not the other, especially in terms of how it affects completion of the ELM requirement. Also, Math 9 and Math 11 are pre-baccalaureate level courses offered outside of the Learning Skills department, and are not included in EO 665 tracking. Since EO 665 states students must satisfy the ELM requirement by demonstrating competence in intermediate algebra, this is a concern.

III. RECOMMENDATIONS

The Learning Skills Center is clearly effective in its mission and goal to provide the highest quality of teaching to those students underprepared for university level work. Every effort should be made to ensure funding be continued at the highest possible level. As the university seeks to increase enrollment, the Learning Skills program will likely grow in the number of students it will serve. Although the Learning Skills Center appropriately resides in the College of Arts and Letters, it is advisable to look at funding this valuable department through Academic Programs, since Learning Skills students are enrolled in academic programs across the university.

It is imperative that the strong leadership in Learning Skills be maintained. Dr. Barrick is the only tenure track faculty member in the mathematics program at the current time. Since his retirement is likely within the next two years, it is recommended an additional tenure track math faculty member be hired. To ensure continuity and quality of this program it is essential that this hire be allowed to cross train with Dr. Barrick and help recruit his replacement.

The quality and continuity of the math program within Learning Skills would be well served by providing permanent tenure track lecture positions for the course coordinators. They are clearly an enthusiastic group passionate about their work. They believe they "are really good at remediation" and often "work miracles" with their students. They report, "You won't find a better place to work" and enjoy the Learning Skills community in which they work. Since students overlap both the English and math programs, faculty in both programs reportedly

“check in with each other”. These teachers deserve the status and recognition for the expertise they bring to this program and their students.

Due to the specialized nature of teaching underprepared students, it is recommended that attempts be made to reduce class size back to 2002-03 levels as soon as possible.

Additional office space for Learning Skills instructors is definitely needed and should be pursued. If feasible, new offices should be centrally located to the Learning Skills Center. Additional student workspace is also needed.

EO 665 requires underprepared students to complete remediation, through *intermediate algebra*, within their first year of enrollment. That Sacramento State University reports students to be fully remediated with completion of LS 7B, LS 10A, or LS 10I, *beginning algebra*, is in apparent conflict with the executive order. Students who score 44-48 on the ELM exam are required to complete remediation with Math 9, *intermediate algebra*, and concurrent enrollment in LS 10X. Thus, it appears there are two levels of satisfying the ELM requirement. This is confusing and should be addressed by the Learning Skills Center, the Mathematics Department, the EO 665 Office, and any others related to EO 665 reporting.

The Learning Skills and Mathematics departments must continue to collaborate. Several issues should be addressed immediately. First, because students who score 44-48 on the ELM exam must concurrently enroll in Math 9 and LS 10X, I recommend linking credit for these courses, rather than issuing separate grades. Secondly, since intermediate algebra (Math 9) is a non-baccalaureate level course, I recommend it be returned to the Learning Skills department with all other remedial courses. Last, I hope discussions with the Math Department regarding course sequences and numbering will continue, and eventually produce changes in Math 1, Math 9, and Math 11. It is confusing to have two non-baccalaureate level courses numbered higher than the GE course (Math 1). There is also confusion in the title of Math 11 as College Algebra. College Algebra courses generally articulate to baccalaureate level algebra courses, which is not the case here. I understand this last issue is outside the realm of the Learning Skills Center, but hope discussion may prompt the Math Department to consider some changes.

FINAL COMMENTS

Thank you for the opportunity to serve as an external reviewer for the mathematics program in the Learning Skills Center. This department should be congratulated for the outstanding service it provides to Sacramento State University and the underprepared students it serves. Its faculty is a most dedicated and hard working group.