

SUCCESS RATE OF MATHEMATICS REMEDIATION
AT CSU CHICO
(2001-2006)

("Remedial Students Remediated Within One Year")

| <i>Year</i> | <i>Success Rate</i> | <i>Number of Students</i> |
|-------------|---------------------|---|
| 2001-2002 | 86.6% | 1227 |
| 2002-2003 | 92.7% | 689 |
| 2003-2004 | 95.7% | 598 |
| 2004-2005 | 97.1% | 721 |
| 2005-2006 | 92.6% | 741 |
| 2006-2007 | | 888 Fall Only w/ 111 on waiting list |

We considered the following as students who succeeded:

- Passed intermediate algebra with a grade of C- or better within one year at Chico State;
- Passed ELM with score 50 or higher through training in the ELM Workshop in fall at Chico State, or passed ELM within one year because of taking remedial math classes at Chico State;
- Passed intermediate algebra with a grade of C- or better or passed ELM (50 or higher) during the summer following math remediation of two semesters at Chico State.

The trend in the success rate in the developmental mathematics program had been a consistent increase from 2001 – 2002 academic year to the 2004 – 2005 academic year. The 2005 – 2006 academic year showed the first decline in the success rate since tracking began. There are several factors that may have contributed to this decline.

First, as the demand for developmental mathematics increases, the rate of success decreases, perhaps because the university is admitting less prepared students. In the 2001 – 2002 academic year there were 1227 students in the program. The numbers decreased to a low of 598 students in the 2003 – 2004 academic year. Since then, the number of students in the program has been increasing. The current student count in the 2006 – 2007 academic year is approximately 888 students with 111 students on a waiting list. This is the first year that the program had to create a waiting list due to over enrollment. In addition to this, there are approximately 20 students who have not taken the Entry Level Math Test (ELM) yet. We expect 10 to 12 of these students will place in the Developmental Mathematics Program.

Second, there has been a change in both the director and staff in the developmental math program. This change has affected the flow of the program in two important ways.

- Intrusive advising, an important and necessary tool in working with developmental students was not emphasized as strongly as it had been in previous years. Recognizing the importance of advising, we in the program have placed advising as a top priority.
- The accounting process used by the previous staff lacked a reasonable auditing process. There were no summaries left to explain the statistics and how they arrived at their success rates. It is not possible to directly compare the statistics from the previous years to the 2005 – 2006 year. The spreadsheets will now include a summary explaining how the success rate is derived.

Third, the pool of part-time lecturers teaching developmental math has increased and some experienced lecturers have left the program. Therefore, we have instructors who are less familiar with the curriculum, program, and philosophy of the developmental math program. While change in any program is expected when staffing with part-time instructors, the past two years have seen more change than in previous years. This change surely has some, albeit minimal, affect on student success.

California State University, Chico is taking efforts to stem the tide of students entering the Developmental Mathematics Program by providing detailed information about the program. A website specifically for developmental math is being constructed and should be in place by the spring of 2007. The purpose of this website is to provide information for incoming freshmen about developmental math, what happens when they complete the program, and how they can complete developmental math before entering the university the fall of their freshmen year. In conjunction with the website, students with ELM scores below 50 and have been admitted to the university, will receive a mailer in the spring, detailing options for completing remedial requirements the summer before they attend.

Since the summer of 1998, CSU, Chico has offered an ELM workshop for students who score 46 or 48 on the ELM. This is an invitational workshop that has been quite successful. Approximately 60% of the students, who attend the 3 day workshop, successfully pass the institutional ELM that immediately follows. This last summer, 58 of the 94 students (61.7%) passed the ELM. These are students who would have been forced enrolled into intermediate algebra, and now eligible for GE math. This next year, it has been proposed that the invitations list be expanded to include students who score 42 and 44. This should, in the least, double our workshop attendance.

Finally, we are striving to increase the success rate of achieving a bachelor's degree for those students who participated in the Developmental Math Program. We are exploring the possibility of requiring GE math immediately upon leaving the Developmental Mathematics Program. Earlier participation in GE math could have a positive affect on the graduation rates of developmental math students. However, requiring earlier GE math could result in some students taking the wrong math course for their yet-to-be-selected ultimate major.