

Table of Contents

INTRODUCTION	1
DATA AND METHODS	2
Cohort	2
Measures and Definitions	2
RESULTS	4
Basic Skills Students Background Data	4
Entering Skill Level	4
Demographic Characteristics of Basic Skills Students	5
Performance of Basic Skills Students	9
Math Performance	10
Math Course Sequence	10
Success	11
Grades	13
Mastery	14
English Performance	18
English Course Sequence	18
Success	19
Grades	22
Mastery	23
ESOL Performance	26
ESOL Course Sequence	26
Success	27
Grades	28
Mastery	30
The Center for Student Success Measures	31
Baseline Measures	31
Progress and Persistence	36
Persistence	36
Persistence and Student Characteristics	37
Demographic Characteristics	38
Other Student Characteristics	39
SUMMARY AND CONCLUSIONS	40

Performance of Basic Skills Students September, 2007

INTRODUCTION

In its effort to meet the educational needs of the San Diego community, the San Diego Community College District prepares students to succeed in college-level courses. The district offers basic skills courses at the colleges to achieve this end. Students rely heavily on this support; approximately one quarter of first-time students take basic skills courses. The purpose of this study is to examine the performance in subsequent courses of the students who have taken math, English, and English for Speakers of Other Languages (ESOL) basic skills courses.

The current report is intended to provide some baseline information on some of the fundamental research questions relating to the performance of basic skills students. This represents the first step in an ongoing effort to provide information useful to improving our developmental education system. Subsequent reports will contain more comprehensive information. New policies and procedures are currently being developed and implemented, so future reports will provide a means of comparing to this baseline.

The current study will include two reports. The first version of the report examines (1) characteristics of basic skills students, (2) performance in areas of math, English, and ESOL, (3) Center for Student Success measures, and (4) persistence of basic skills students. The report also provides a description of the data and methods as well as a brief summary. The second report, to be completed later in the year, will go into more depth on these topics as well as address other topics including (1) the impact of student support services, (2) the role of non-credit basic skills courses, (3) the influence of assessment levels, (4) the performance of basic skills students in other subject areas, and (5) the progression through basic skills level courses.

DATA AND METHODS

Student databases provide the data for this report. Most of the analyses utilize data from the cohort of incoming first-time students in the fall of 2001. This cohort is described below. Additionally, data from Fall 2006 are used to address the measures defined by the Center for Student Success.

Cohort

• A cohort of 4,376 students was identified for Fall 2001. Only <u>first-time students</u> enrolled in one or more units were included. Enrolled units include classes from which students withdrew. Data on courses taken by this cohort from Fall 2001 to Summer 2006 were compiled into a data file used for this project.

Table 1: Fall 2001 First-time Student Cohort by College

	#	%
CITY COLLEGE/ECC	1,531	35.0
MESA COLLEGE	1,954	44.7
MIRAMAR COLLEGE	891	20.4
Total	4,376	100.0

• Miramar College's number includes 73 students who participated in the Public Safety Inservice program. Six of those students took other types of classes as well.

Measures and Definitions

Many of the terms used in this report have carried different meanings in different contexts, so it is important to clarify exactly what is meant by these terms for the purposes of this study.

Basic Skills

The term *basic skills* has been used in a number of ways, and has even been abandoned by some researchers. Therefore, it is necessary to define explicitly how the term is being used in the present study. *Basic skills* refers to courses in math, English, and ESOL with current course numbers below 50. This definition allows for a useful distinction between basic skills and associate level courses, and is consistent with TOP code designations and previous research. Course sequence diagrams specifying where courses are classified for math, English, and ESOL are included in the sections on performance.

Completion

Completion refers to receiving a grade in a course or set of courses that indicates that the student finished a class, regardless of how successfully. It is indicated by grades of A, B, C, D, F, CR, or NC.

Success

Success is a subset of completion. Students were *successful* if they receive a grade that allowed them to progress to the next level. Success was indicated by grades of A, B, C, or CR. While a D is a passing grade, it does not allow the student to take the next level course, and therefore is not considered successful completion.

Mastery

For the purposes of this study, *mastery* means a student has achieved command of a subject matter. Mastery is indicated in this study by a grade of A or B.

Persistence

Persistence refers to whether or not a student in a given term returned to any college in the district in a subsequent term. This study examines both fall-to-spring persistence and fall-to-fall persistence.

RESULTS

Basic Skills Students' Background Data

Entering Skill Level of Fall 2001 Cohort

It is important to note the distinction between *placement levels* and our designation of *basic skills* students. Those who placed at the pre-collegiate level may or may not have taken a basic skills class, and therefore are not necessarily a basic skills student as defined in this study. Similarly, students may be categorized in this study as basic skills students because they have taken a basic skills class without having been assessed at the pre-collegiate level. The entering skill levels of the students in the entire Fall 2001 cohort of 4,376 students were examined. Entering skill levels are summarized in Table 2.

- Districtwide, around 60% of the cohort took an assessment test during their first term.
- Of the students who took an assessment test, 10% (268) placed in precollegiate *reading* (pre-basic skills or basic skills), 19% (506) in precollegiate *writing*, and 40% (982) in precollegiate *math*. Another 314 students took or were directed to take the ESL test. Only 11% placed at transfer level in math.

Table 2: Skill Level of Fall 2001 Cohort

Table 2. Skiii Level of Fail 2001 Conort						
	Reading Writing		Math			
	#	%	#	%	#	%
NO PLACEMENT	1,766	40%	1,766	40%	1,897	43%
						_
Precollegiate	268	10%	506	19%	982	40%
Associate	360	14%	720	28%	1,214	49%
Transfer	1,982	76%	1,384	53%	283	11%
Subtotal	2,610	100%	2,610	100%	2,479	100%
Grand Total	4,376		4,376		4,376	

Demographic Characteristics of Basic Skills Students

Percent who took basic skills classes: Within five years (Fall 2001 through Summer 2006), out of the original 4,376 students, 1,244 students (28%) attempted at least one basic skills Math, English, or English for Speakers of Other Languages (ESOL) course. These 1,244 students constitute the "basic skills students" in this study. Of these 1,244 basic skills students, there were 920 students who attempted basic skills Math, 592 students who attempted basic skills English, and 197 who attempted ESOL courses. There were 354 students who attempted both basic skills Math and basic skills English or ESOL.

Gender: There was a higher percentage of females within those who attempted basic skills classes. Specifically, 54.5% of 1,244 basic skills students were female, but only 44.6% (1,397) of the rest of the Fall 2001 cohort (the 3,132 students who did not take a basic skills class) was female.

Table 3: Gender by Attempted Basic Skills Course

	Attempted Basic Skills Classes	No Basic Skills Classes
Female	54.5%	44.6%
Male	44.7%	55.0%
Unknown	0.8%	0.4%

Ethnicity: Table 3 displays the gender distribution separately for the 1,244 basic skills students and the 3,132 non basic skills students. Some race and ethnicity categories were overrepresented among the basic skills students. There were higher percentages of Asians, African-Americans, and Hispanics within those who attempted basic skills classes, and a lower percentage of whites.

Table 4: Race and Ethnicity by Attempted Basic Skills Course

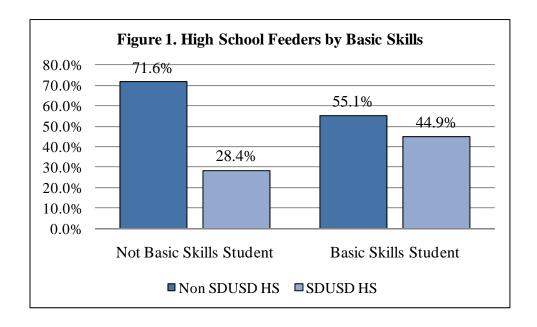
	Attempted Basic Skills Classes			sic Skills
	#	%	#	%
American Indian	14	1.1	46	1.5
Asian	170	13.7	253	8.1
African American	175	14.1	290	9.3
White	307	24.7	1,448	46.2
Latino	337	27.1	549	17.5
Filipino	89	7.2	179	5.7
Pacific Islander	10	0.8	40	1.3
Other	98	7.9	142	4.5
Declined	44	3.5	185	5.9
Total	1,244	100	3,132	100

Age during first term at SDCCD: There was a higher percentage of younger students within those who attempted basic skills classes. For example, 86.9% of those attempting basic skills classes were under 30 at the time of application, while 82.7% of the other students in the cohort were under 30.

Table 5: Age by Attempted Basic Skills Course

	Attempted Basic Skills Classes			asic Skills
	#	%	#	%
19 and under	677	54.4	1,510	48.2
20 - 24	310	24.9	830	26.5
25 - 29	95	7.6	251	8.0
30 - 34	58	4.7	185	5.9
35 - 39	28	2.3	124	4.0
40 - 49	53	4.3	183	5.8
50 and >	18	1.4	45	1.4
Missing	5	0.4	4	0.1
Total	1,244	100	3,132	100.0

High School Feeders: The high school feeders are the high schools that are part of the San Diego Unified School District (SDUSD), which is within the boundary of the district. Students are categorized as being from a high school feeder if they listed a high school from SDUSD on their application. Overall, a third (33.1%) of the Fall 2001 cohort came high school feeders (SDUSD high schools). Close to half (44.9%) of the basic skills students in the Fall 2001 cohort came from SDUSD, while for the rest of the Fall 2001 cohort, 28.4% came from the district's high school feeders in the SDUSD. This is summarized in Figure 1.



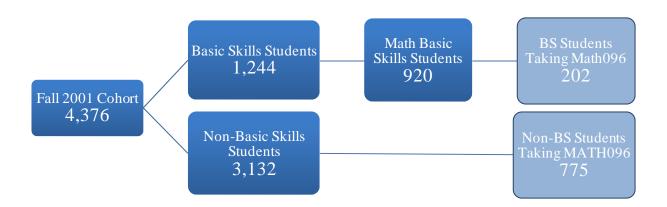
Annual Successful Course Completion Rate in Basic Skills Courses (includes all students who attempted basic skills courses): Successful course completion refers to receiving a grade of A, B, C, or CR.

Table 6: Success Rate of Basic Skills Courses by Year

	2001 - 02	2002 - 03	2003 - 04	2004 - 05	2005 - 06
City College	57.7%	57.2%	52.9%	56.4%	52.9%
Mesa College	62.2%	63.1%	61.0%	66.2%	67.0%
Miramar College	63.0%	63.7%	64.9%	64.0%	62.8%
District	59.8%	59.7%	57.4%	60.2%	59.0%

Performance of Basic Skills Students

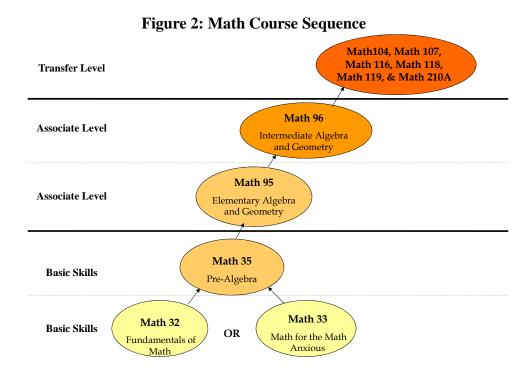
In this section, a number of comparisons are made between basic skills students and other students from the Fall 2001 cohort. It is important to make clear that these analyses include only those students who have taken the course under analysis. For example, in the comparison of success rates in Math 096 between basic skills students and other students, 977 students are included in the comparison – 202 basic skills students and 775 other students from the Fall 2001 cohort. The diagram below shows the relation between those in the comparison and the cohort as a whole.



Math Performance

Math Course Sequence

Figure 2 diagrams the math course sequence from basic skills to transfer level courses. There are three basic skills courses in the math course sequence. A student who takes math basic skills courses must pass basic skills math, then Math 095, then Math 096, before he or she can take transfer level math courses (Math 104 and higher). For the purposes of this study, transfer level math refers to the six courses that immediately succeed Math 096 (Math 104, Math 107, Math 116, Math 118, Math 119, and Math 210A). Outcomes with respect to transfer level math are determined by the highest grade received at that level. Thus, a student who took both Math 104 and received a "D" and Math 116 and received a "B" would have the "B" grade used in determination of outcome variables such as success or average grade.



Institutional Research and Planning; March 14, 2008 Basic Skills Study-2007-V2-1

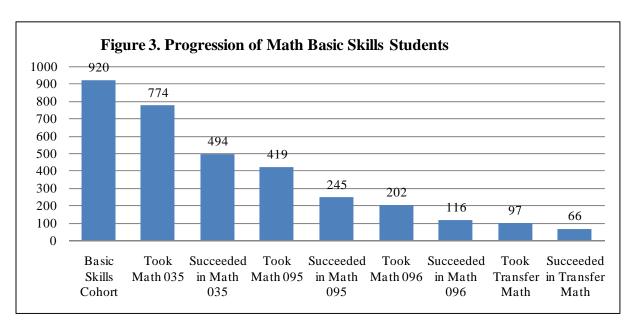
Success

Not all of the basic skills students attempted Math 095 during the span of this study. Of the 920 math basic skills students, less than half (419) attempted Math 095. The percentages of basic skills students completing the associate level and transfer level math courses (Math 104, Math 107, Math 116, Math 118, Math 119, and Math 210A) and passing those courses are displayed in Table 7. Of the 920 math basic skills students in the cohort, 37.1% took and completed Math 095, and a quarter (26.6%) of the math basic skills students took and succeeded in Math 095. An eighth (12.6%) went on to pass Math 096 successfully. Success at transfer level math means success

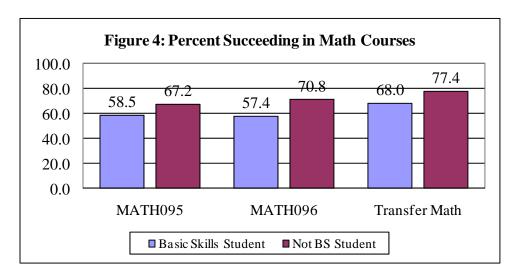
Table 7. Success of Basic Skills Students in Math 095 & 096

		Succeeded (A,
	Completed	B, C, or CR)
Math 095 Outcomes for Basic Skills Students	37.1%	26.6%
Math 096 Outcomes for Basic Skills Students	18.5%	12.6%
Transfer Math Outcomes for Basic Skills Students	9.1%	7.2%

The progression of the math basic skills students is illustrated in Figure 3. Of the 920 math basic skills students, 774 (84%) took Math 035. Of those that took Math 035, 494 succeeded in Math 035, the last course in the math basic skills sequence. Of the 920 math basic skills students, 419 (46%) took Math 095. Of those that took Math 095, 245 (58%) passed it successfully. Two hundred and two (82% of the number of students who passed Math 095) basic skills students took Math 096. Of the 202 who took Math 096, 116 (57%) passed the course. A total of 97 math basic skills students from the Fall 2001 cohort took a transfer level math course. This is 84% of the number succeeding in Math 096. Two thirds (68%) of these students succeeded at transfer level math. The figure shows that 494 of the 920 (53.7%) of the math basic skills cohort reached and succeeded in Math 035, and therefore were in a position to move on to math courses at the associate level.



Of the Fall 2001 cohort, 1,364 (419 basic skills students and 945 others) took Math 095, 977 (202 basic skills students and 775 others) took Math 096, and 855 (97 basic skills students and 758 others) took transfer level math. Figure 4 shows the success rates in Math 095, Math 096, and transfer math for both basic skills students and for other students in the Fall 2001 cohort who took those classes. For basic skills students attempting the courses, 58.5% passed Math 095, and 57.4% passed Math 096. Basic skills students succeeded in transfer level math at a 68.0% rate. A similar pattern is seen for non-basic skills students. That is, success rates were higher in transfer level math than they were for Math 095 and 096. While the success rates for Math 095 and Math 096 differ between math basic skills students and other students, basic skills students and others did not differ significantly for transfer level math classes.



Grades

Average grade provides another view of the performance of math students. Table 8 shows the average grade points in Math 095, Math 096, and transfer math for both basic skills students and for other students. Basic skills students, on average, received lower grades than did the other students in the cohort.

Table 8. Average Grade Points by Basic Skills

U		
	Basic Skills	Not Basic Skills
	Student	Student
Math 095	2.13	2.42
Math 096	1.94	2.45
Transfer Math	2.24	2.74

Mastery

Not all students who successfully pass a class leave that class with the same level of understanding of the material. When a student has achieved a thorough understanding of a subject he or she is said to have mastered it. Mastery is indicated in this study by a grade of A or B. The study compares those students who have mastered the material at a given level to those who have merely passed that level on their performance at the next level. Table 9 shows that among basic skills students, those students who mastered Math 035 significantly outperformed those who merely passed Math 035 when taking Math 095. More than two-thirds (69.7%) of the students who mastered Math 035 successfully completed Math 095 compared to 39.4% of those who merely passed Math 035.

Table 9. Math 095 Performance by Math 035 Mastery.

	Mastery	
	No	Yes
Did Not Complete (I,W)	26.0%	13.4%
Unsuccessful Completion (D,F,NC)	34.6%	16.9%
Successful Completion (A,B,C,CR)	39.4%	69.7%

Performance in Math 096 reveals a similarly dramatic pattern. That is, students who mastered Math 095 outperformed students who merely passed Math 095 when taking Math 096. This is seen in Table 10. More than two-thirds of students who mastered Math 095 successfully completed Math 096. However, less than half of those who merely passed Math 095 passed Math 096 successfully.

Table 10. Math 096 Performance by Math 095 Mastery.

	Mastery	
	No	Yes
Did Not Complete (I,W)	18.8%	12.6%
Unsuccessful Completion (D,F,NC)	33.8%	19.4%
Successful Completion (A,B,C,CR)	47.5%	68.0%

Table 11 displays performance at the transfer level split by mastery of Math 096. Success in transfer level math did not differ by mastery of Math 096 at a statistically significant level.

Table 11. Transfer Level Math Performance by Math 096 Mastery

	Mastery	
	No	Yes
Did Not Complete (I,W)	18.6%	8.6%
Unsuccessful Completion (D,F,NC)	25.6%	11.4%
Successful Completion (A,B,C,CR)	55.8%	80.0%

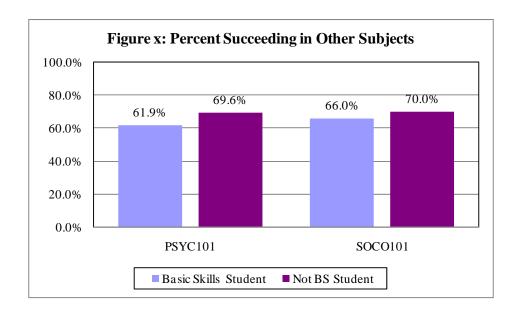
The impact of mastery was also evident when examining average grade points. For each level, the average grade for those who had mastered the preceding level was significantly higher than it was for students who merely passed the preceding level. This is true even at the transfer level, though the success rates (in Table 11) did not differ at a statistically significant level. While these findings are ostensibly inconsistent, the *grade* variable provides for greater statistical power in the analysis than does the *success* variable because the grade variable has more gradations than the success variable, allowing for greater variability. This allows for a significant effect to be demonstrated on the grade variable that was not evident with the success variable.

Table 12: Mean Grade Points in Math095, Math096, & Transfer Courses

Mastery of Preceding Level	Math 095	Math 096	Transfer Math
No	1.58	1.66	1.76
Yes	2.39	2.18	2.75

Performance in Other Subjects

In attempt to look at the success of basic skills students in other subjects two elective courses were selected. The two courses that were examined, Psychology 101 and Sociology 101, were selected because a high frequency of students in the Fall 2001 cohort attempted these courses. From the Fall 2001 cohort, 1,268 (289 math basic skills students and 979 others) took Psychology 101 and 836 (209 math basic skills students and 627 others) took Sociology 101. Figure X shows the success rates in Psychology 101 and Sociology 101 for both math basic skills students and other students who attempted those classes. The success rate for basic skills students in Psychology 101 was 61.9% and the rate for Sociology 101 was 66.0%. There was a significant difference between the success rate for basic skills students and other students attempting Psychology 101. The difference between basic skills students and other students attempting Sociology 101 was not significantly different.



Grades

Table XX shows the average grade points in Psychology 101 and Sociology 101 for math basic skills students and for other students. The average grade points in Psychology 101 were lower for basic skills students compared to non basic skills students. The average grade points for Sociology 101 were very similar between basic skills students and non basic skills students.

Table xx. Average Grade Points for Other Subjects

	Basic Skills	Not Basic Skills
	Student	Student
Psychology 101	2.05	2.48
Sociology 101	2.31	2.39

English Performance

English Course Sequence

The English course sequence from basic skills to transfer level courses is displayed in Figure 5. English 042 and English 043 are the two basic skills courses in the English course sequence, and English 051 and English 056 are the associate level courses that precede transfer level English courses. For this study, transfer English is limited to English 101 and English 105. Outcomes (such as success or average grade) with respect to basic skills and associate level English are determined by the highest grade received at those levels.

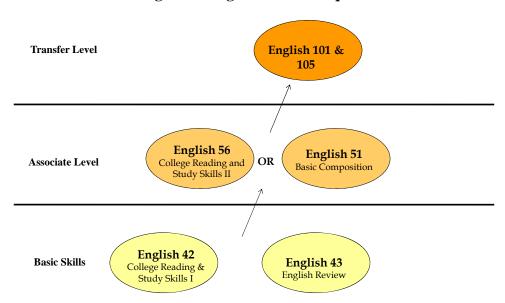


Figure 5: English Course Sequence

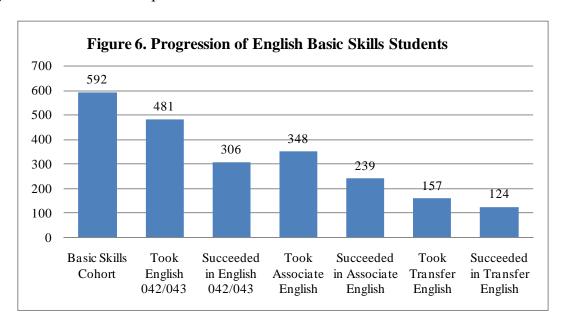
Success

Table 13 displays the likelihood of taking and passing successfully associate level and transfer level English courses for basic skills students in English. Unlike the math sequence, there are two different courses (Engl 051 & Engl 056) that could satisfy the associate level in English. Success in either of these courses is regarded as success for these analyses. Half (52.0%) of the English basic skills students completed an associate level class, and 40.4% completed it successfully. A quarter (24.2%) of English basic skills students took and completed a transfer level English course, and 20.9% completed these courses successfully.

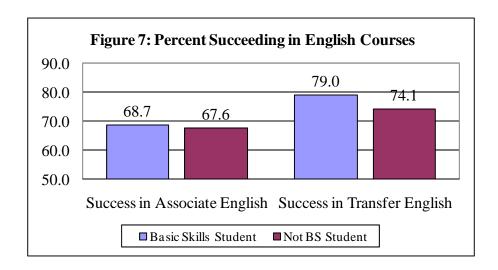
Table 13. Success of Basic Skills Students in Associate and Transfer Level English

		Succeeded (A,
	Completed	B, C, or CR)
Associate Level English Outcomes for		_
Basic Skills Students	52.0%	40.4%
Transfer English Outcomes for Basic Skills		
Students	24.2%	20.9%

Figure 6 displays the progression of the English basic skills students. It shows that of the 592 English basic skills students, 481 took English 042 or 043. Of those English basic skills students 306 succeeded in English 042 or 043. Of the 592 English basic skills students, 348 (59%) took an associate level course – this includes 45 basic skills students who did not succeed in English 042 or 043. Future analyses will investigate students who took associate level English without succeeding in English 042 or 043 when this group becomes larger. Of those English basic skills students who took an associate level course, more than two-thirds (69%) passed it. A total of 157 basic skills students (66% of the number of students who passed associate level English) took transfer level English. Of these, 124 (79%) passed the course successfully. The figure illustrates that the biggest drop-off is from the basic skills cohort to succeeding in basic skills English, they are fairly successful with subsequent classes.

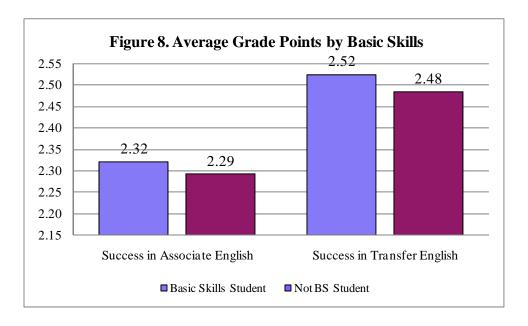


Three hundred forty eight of the basic skills students and 729 of the other students in the Fall 2001 cohort attempted associate level English, while 157 basic skills students and 1,679 of the rest of the cohort took transfer level English. Figure 7 shows the success rate of students who attempted associate and transfer level English. The figure reveals no statistically significant difference between basic skills students and the other students in the cohort in success rates for either associate or transfer level English. As noted above, over two-thirds of the basic skills students who took associate level English passed it, and four out of five basic skills students who took transfer level English passed it.



Grades

The performance of basic skills students in subsequent courses was also measured in terms of grade points. Average grade points in associate and transfer level courses were compared for basic skills students and other students. Figure 8 shows that the average grade points for basic skills students did not differ significantly from other students in the cohort for both associate and transfer level courses.



Mastery

As with math classes, mastery in English is indicated in this study by a grade of A or B. The study compares those basic skills students who have mastered the material at a given level to those who have merely passed that level on their performance at the next level. Table 14 shows a marginal effect of mastery of English basic skills on success at associate level English. While two-thirds (66.7%) of the students who had not demonstrated mastery over English basic skills successfully completed associate level English, three-quarters (75.9%) of those who mastered English basic skills successfully completed associate level English.

Table 14. Associate Level English Performance by English Basic Skills Mastery

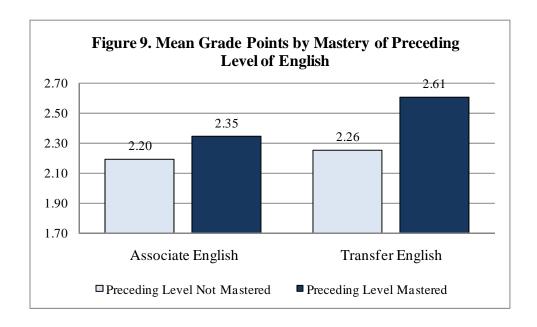
	Mastery		
	No	Yes	
Did Not Complete (I,W)	13.5%	4.1%	
Unsuccessful Completion (D,F,NC)	19.8%	20.0%	
Successful Completion (A,B,C,CR)	66.7%	75.9%	

Mastery of associate level English was did not significantly predict performance in transfer level courses. As indicated in Table 15, 81.4% of those who had mastered associate level English were successful in transfer level English if they took it, and 71.4% of those who merely passed associate level English were successful.

Table 15. Transfer English Performance by Associate Level Mastery

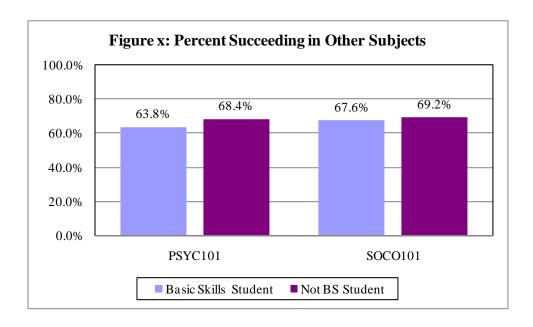
	Mastery			
	No	Yes		
Did Not Complete (I,W)	7.1%	9.8%		
Unsuccessful Completion (D,F,NC)	21.4%	8.8%		
Successful Completion (A,B,C,CR)	71.4%	81.4%		

The impact of mastery on performance was also examined in terms of average grade points. However, because grades of credit, no credit, and withdrawals could not be converted to grade points, these analyses rely on smaller numbers than did the *success* analysis. Average grade points showed no statistically significant impact of mastery of the preceding level of English on subsequent performance. Mean grade points for transfer level English are displayed in Figure 9, split by mastery over associate level English.



Performance in Other Subjects

The same analysis used to examine performance in other subjects for math basic skills students was used with English basic skills students. From the Fall 2001 cohort, 1,268 (160 English basic skills students and 1108 others) took Psychology 101 and 836 (105 English basic skills students and 731 others) took Sociology 101. Figure X shows the success rates in Psychology 101 and Sociology 101 for both English basic skills students and other students who attempted those classes. The success rate for basic skills students in Psychology 101 was 63.8% and the rate for Sociology 101 was 67.6%. There was a difference between the success rate for basic skills students and other students attempting Psychology 101, but it was not significant. The success rates for basic skills students and other students attempting Sociology 101 were very similar.



Grades

Grade points were used as another measure of the performance of basic skills students in other subjects. The average grade points for Psychology 101 and Sociology 101 were compared for basic skills students and other students. Figure XX shows a significant difference for average grade points between basic skills students and other students for Psychology 101 and Sociology 101. Basic skills students had lower average grade points compared to other students for both courses.

Table xx. Average Grade Points for Other Subjects

	Basic Skills	Not Basic Skills
	Student	Student
Psychology 101	1.95	2.45
Sociology 101	2.10	2.41

ESOL Performance

This section presents the findings with respect to performance of ESOL students. It should be regarded with consideration for the fact that in the cohort, only 197 students took an ESOL class. Most of the analyses in this section will involve only a subset of this category. For example, of the 197 ESOL students, 64 attempted an associate level English course, so analyses of performance in associate level English for ESOL students is limited to only 64 cases. Until more data can be compiled, the stability of the ESOL analyses will remain a question.

ESOL Course Sequence

The ESOL course sequence is diagrammed in Figure 10. The ESOL sequence has four levels. Level 1 is ESOL 019, Transitional English for ESOL Students. Levels 2 through 4 each comprise three courses: (1) reading, (2) writing, and (3) listening and speaking. For each level required of the student, the student must take all courses, though there are no restrictions on the order in which the student takes the courses within a level. English 051 and English 056 are the associate level courses that precede transfer level English courses. Outcomes with respect to Levels 2 through 4 and associate level English are determined by the highest grade received at those levels.

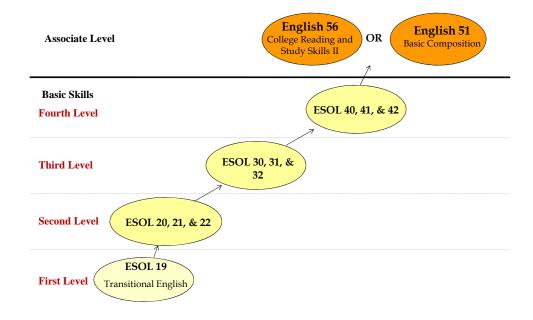


Figure 10: ESOL Course Sequence

Success

The percent of ESOL students succeeding at any class within each level is displayed in Table 16. As the table shows, the completion rate for these classes is quite high. The success rate is also high, ranging from 69% (49 out of 71) for ESOL Level 1 to 80% (74 out of 92) for ESOL Level 2. The difference between these success rates is at least in part a function of the fact that for Levels 2 through 4, students have to take three different courses, but for this analysis are regarded as a success if they succeeded in any of the three courses. ESOL students who advance to associate level English have a completion rate of 89.1% and a success rate of 81.3%.

Table 16. Percent of ESOL Students Succeeding at Each Level

			Succeeded (A,
	N	Completed	B, C, or CR)
Level 1 Outcomes for ESOL Students	71	87.3%	69.0%
Level 2 Outcomes for ESOL Students	92	95.7%	80.4%
Level 3 Outcomes for ESOL Students	100	95.0%	90.0%
Level 4 Outcomes for ESOL Students	81	88.9%	79.0%
Associate Level English Outcomes for ESOL			
Students	64	89.1%	81.3%

The success rate of the 64 ESOL students in associate level English was compared to the success rate of other students. Figure 11 reveals a higher success rate for ESOL students than other students in associate level English courses.

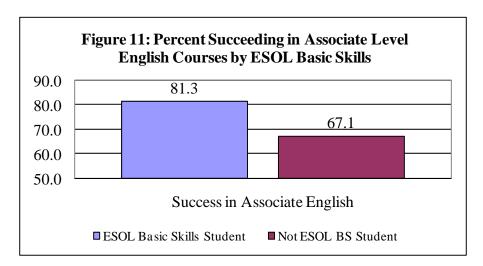
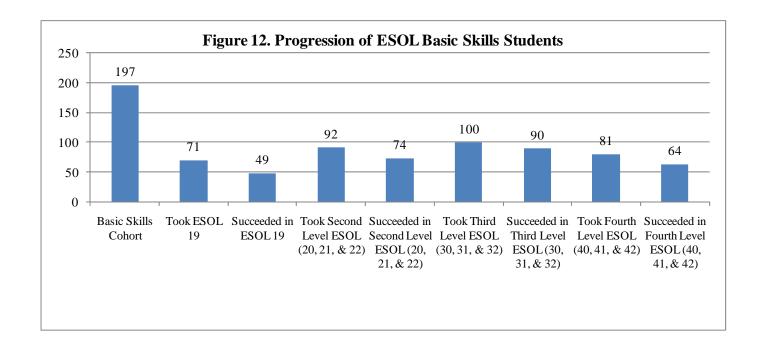
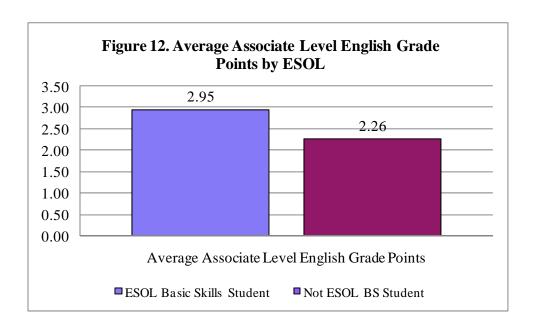


Figure 12 shows the progression of the ESOL basic skills students. Of the 197 ESOL basic skills students, 71 (36%) took ESOL 19. Of those ESOL basic skills students 49 succeeded in ESOL 19. There were 92 (47%) ESOL basic skills students who took level 2 ESOL. Of those ESOL basic skills students 74 were successful. There were 100 (51%) ESOL basic skills students who took level 3 ESOL. Of those ESOL basic skills students 90 were successful. There were 81 (41%) ESOL basic skills students who took level 4 ESOL basic skills students 64 succeeded in level 4 ESOL.



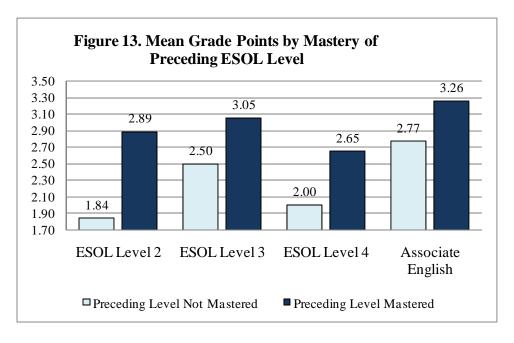
Grades

Consistent with the success rate advantage noted above, ESOL students achieved a higher average grade point than did other students taking associate level English. Figure 12 shows that ESOL basic skills students earned grades an average of 0.69 points higher than other students in associate level English.



Mastery

The number of students in the cohort taking multiple levels of ESOL was limited, which places some constraints on the analysis of these data. A cross tabulation of mastery and success is not feasible, and analyses of grade points rely on subsamples that range in size from 37 cases to 49 cases. Despite the limited subsample, an effect was observed of the achievement of mastery at a given level on performance at the next level for ESOL students. This is illustrated in Figure 13, which shows that for ESOL Level 2 performance and ESOL Level 4 performance, mastery of the preceding level had a significant positive impact on performance.



The Center for Student Success Measures

The Center for Student Success (CSS) has established a number of baseline and recommended measures that are intended to provide a quantitative overview of developmental education at California community colleges. Most of the measures identified by CSS are addressed in this section.

CSS specifies that their measures come from a fall term. For these term-specific measures in this report we have used data from Fall 2006. Tutoring classes are excluded from these analyses.

Baseline Measures

All the baseline measures identified in the self assessment section of the CSS Basic Skills as a Foundation for Student Success in Community Colleges are addressed in this report. Measures for each college along with the district totals are provided in this section.

Table 17. CSS Baseline Measur	res for City College
	Levels of Measurement

	Levels of Measurement						
Baseline Measures for	All	All Optional, Discipline-Specific Developmental					
Developmental Education	Develop-	Math	Math English Reading Writing				
(DEV) For Fall 2006	mental	(DEV)	(DEV)	(DEV)	(DEV)	(DEV)	
Percentage of New Students							
Assessed Into Developmental							
Education Courses	10.2%	4.3%	4.1%	1.5%	2.6%	1.9%	
Number of Developmental							
Education Sections Offered	65	28	19	7	12	18	
Percentage of Section Offerings							
That Are Developmental							
Education	3.1%	15.3%	10.4%	3.8%	6.6%	90.0%	
Unduplicated Number of Students							
Enrolled in Developmental							
Education	1,140	613	320	66	254	207	
Student Success Rate in							
Developmental Education Courses	53.8%	39.8%	59.4%	61.7%	58.3%	76.0%	
Student Retention Rate in							
Developmental Education Courses	62.4%	55.6%	62.7%	63.9%	62.1%	78.1%	
Student Course Repetition Rate in							
Developmental Education Courses							
Fall 2006 to Spring 2007	21.4%	23.3%	16.5%	17.9%	15.9%	22.6%	
Fall-to-Fall Persistence Rate of							
Developmental Education Students							
2005-2006	47.3%	48.3%	44.9%	48.5%	45.3%	50.2%	
Percentage of Developmental Ed							
Sections Taught by Full-Time							
Faculty	38.5%	28.6%	52.6%	28.6%	66.7%	38.9%	

Table 18. CSS Baseline Measures for Mesa College							
	Levels of Measurement						
Baseline Measures for	All	Optional, Discipline-Specific Developmental					
Developmental Education	Develop-	Math	English	Reading	Writing	ESL	
(DEV) For Fall 2006	mental	(DEV)	(DEV)	(DEV)	(DEV)	(DEV)	
Percentage of New Students							
Assessed Into Developmental							
Education Courses	11.7%	4.9%	3.4%	0.9%	2.5%	3.4%	
Number of Developmental							
Education Sections Offered	84	21	18	7	11	45	
Percentage of Section Offerings							
That Are Developmental							
Education	4.5%	17.3%	15.1%	2.6%	4.1%	94.7%	
Unduplicated Number of Students							
Enrolled in Developmental							
Education	1,420	624	337	77	260	459	
Student Success Rate in							
Developmental Education Courses	61.8%	49.0%	57.1%	55.9%	57.6%	80.5%	
Student Retention Rate in							
Developmental Education Courses	66.7%	59.6%	59.5%	70.3%	55.2%	82.7%	
Student Course Repetition Rate in							
Developmental Education Courses							
Fall 2006 to Spring 2007	21.9%	20.3%	15.4%	23.3%	12.4%	38.3%	
Fall-to-Fall Persistence Rate of							
Developmental Education Students							
2005-2006	47.6%	51.2%	56.9%	62.0%	55.4%	37.4%	
Percentage of Developmental Ed							
Sections Taught by Full-Time							
Faculty	46.4%	47.6%	55.6%	28.6%	72.7%	42.2%	

Table 19. CSS Baseline Measures for Miramar College							
	Levels of Measurement						
Baseline Measures for	All	Optional, Discipline-Specific Developmenta					
Developmental Education	Develop-	Math	English	Reading	Writing	ESL	
(DEV) For Fall 2006	mental	(DEV)	(DEV)	(DEV)	(DEV)	(DEV)	
Percentage of New Students							
Assessed Into Developmental							
Education Courses	13.1%	5.6%	5.1%	2.0%	3.1%	2.4%	
Number of Developmental							
Education Sections Offered	45	14	13	5	8	18	
Percentage of Section Offerings							
That Are Developmental							
Education	3.2%	11.7%	6.7%	5.8%	9.3%	91.8%	
Unduplicated Number of Students							
Enrolled in Developmental							
Education	704	286	217	65	152	201	
Student Success Rate in							
Developmental Education Courses	67.8%	58.0%	64.6%	77.0%	57.6%	81.8%	
Student Retention Rate in							
Developmental Education Courses	68.8%	61.0%	62.7%	78.4%	69.5%	75.4%	
Student Course Repetition Rate in							
Developmental Education Courses							
Fall 2006 to Spring 2007	23.7%	27.4%	19.7%	14.3%	21.3%	22.1%	
Fall-to-Fall Persistence Rate of							
Developmental Education Students							
2005-2006	50.5%	47.7%	56.0%	56.3%	57.3%	52.2%	
Percentage of Developmental Ed							
Sections Taught by Full-Time							
Faculty	17.8%	14.3%	15.4%	20.0%	12.5%	22.2%	

Table 20. CSS Baseline Measures - Districtwide

Table 20. CSS Baseline Measures - Districtwide						
	Levels of Measurement					
Baseline Measures for	Develop-	Optional, Discipline-Specific Developme				omental
Developmental Education (DEV) For	mental	Math	English	Reading	Writing	ESL
Fall 2006	Education	(DEV)	(DEV)	(DEV)	(DEV)	(DEV)
Percentage of New Students Assessed						
Into Developmental Education Courses	11.5%	4.8%	4.0%	1.3%	2.7%	2.7%
Number of Developmental Education						
Sections Offered	194	63	50	19	31	81
Percentage of Section Offerings That						
Are Developmental Education	3.4%	14.2%	9.3%	3.5%	5.8%	92.0%
Unduplicated Number of Students						
Enrolled in Developmental Education	3,264	1,523	874	208	666	867
Student Success Rate in Developmental						
Education Courses	60.3%	47.2%	59.8%	63.7%	57.9%	79.7%
Student Retention Rate in						
Developmental Education Courses	65.6%	58.3%	63.9%	69.8%	61.1%	79.5%
Student Course Repetition Rate in						
Developmental Education Courses Fall						
2006 to Spring 2007	22.1%	22.8%	16.8%	19.4%	15.8%	29.4%
Fall-to-Fall Persistence Rate of						
Developmental Education Students						
2005-2006	48.1%	49.1%	51.1%	53.6%	50.9%	44.6%
Percentage of Developmental Ed						
Sections Taught by Full-Time Faculty	37.1%	31.7%	44.0%	26.3%	54.8%	37.0%

Progress and Persistence

Persistence

The persistence of basic skills students was assessed for the Fall 2001 cohort. Persistence refers to whether or not a student in a given term returns to the district in a subsequent term. In this study we have examined both fall-to-spring persistence and fall-to-fall persistence. A student enrolled in Fall 2002 is said to have persisted from fall to fall regardless of his or her spring enrollment. Figure 14 provides a look at the persistence for basic skills students. Of the 1,244 basic skills students in the Fall 2001 cohort, 690 remained in Fall 2002.

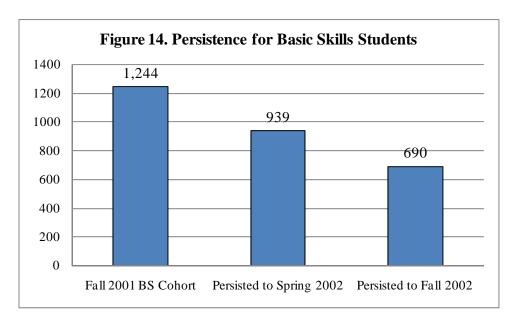


Table 19 shows that basic skills students were more likely to persist to the next term (Spring 2002) than were other students in the cohort. In fact, three quarters of the basic skills students persisted to the spring term.

Table 19. Fall to Spring Persistence by Basic Skills

	Not a BS	Basic Skills
	Student	Student
Did Not Persist to Following Spring	44.2%	24.5%
Persisted to Following Spring	55.8%	75.5%
Total	100.0%	100.0%

Persistence from Fall 2001 to Fall 2002 is displayed in Table 20. The fall-to-fall persistence results also show an advantage for basic skills students. Over half (55.5%) of the basic skills

students were still enrolled in Fall of 2002 compared to 41.1% of the other students. This higher persistence rate among basic skills students may be, in part, a function of the higher likelihood among non-basic skills students of attending a college for a specific course, and thus their needs may be met after a single term.

Table 20. Fall to Fall Persistence by Basic Skills

Not a E		Basic Skills
	Student	Student
Did Not Persist to Following Fall	58.9%	44.5%
Persisted to Following Fall	41.1%	55.5%
Total	100.0%	100.0%

Persistence and Student Characteristics

Several student characteristics were examined to see if they differentiate between those that persisted to the following fall (Fall 2002) and those who did not. The demographic characteristics include gender, race and ethnicity, age, marital status, number of dependents, and total family annual income. The other student characteristics examined were financial aid status, residency, concurrent enrollment in a degree program at a four-year institution, EOPS status, DSPS status, and units added.

Demographic Characteristics

Basic skills students that persisted did differ from those that did not persist with respect to a couple demographic characteristics. Tables 21 and 22 summarize the differences in those that persisted and those that didn't in terms of demographic characteristics. An examination of these tables reveals the following:

- Those that persisted were, on average, two years younger than those who did not persist.
- Those that persisted were more likely to be single than those who did not persist.

Table 21. Age and Persistence of Basic Skills Students

	N	Mean
Did Not Persist to Following Fall	553	25.40
Persisted to Following Fall	690	23.48

Table 22. Marital Status and Persistence of Basic Skills Students

	Married	Single
Did Not Persist to Following Fall	54.7%	43.1%
Persisted to Following Fall	45.3%	56.9%

Other Student Characteristics

Tables 23 and 24 show the differences in those that persisted and those that didn't in terms of other student characteristics. These tables indicate the following:

- Those that were receiving EOPS services were more likely to persist than those who did not receive EOPS services.
- On average, those that persisted had added more units than those who did not persist.

Table 23. EOPS Status and Persistence of Basic Skills Students

	Not Receiving	Receiving EOPS	
	EOPS Services	Services	
Did Not Persist to Following Fall	46.7%	26.9%	
Persisted to Following Fall	53.3%	73.1%	

Table 24. Units Added and Persistence of Basic Skills Students

	N	Mean
Did Not Persist to Following Fall	554	10.86
Persisted to Following Fall	690	12.64

SUMMARY AND CONCLUSIONS

This report has presented a picture of basic skills students, and assessed their performance in courses subsequent to basic skills in the math and English course sequences. Some key points are noted below.

General

- Out of the 4,376 students in the cohort, there were 920 math basic skills students, 592 English basic skills students, and 197 ESOL basic skills students.
- Of the basic skills cohort, 354 took both math and English basic skills courses.
- Basic skills students were more likely to be female, Asian, African American, Hispanic, and younger than were other students in the cohort.

Math

- Of all 920 math basic skills students, 26.6% took and passed Math 095, and of those who attempted it, 58.5% passed.
- Of all math basic skills students, 12.6% took and passed Math 096, and of those who attempted it, 57.4% passed successfully.
- Generally, mastery of the prior level of math significantly increased the chances of success at the current level, though this effect was weaker at higher levels.

English

- Of all English basic skills students, 40.4% took and passed associate level English, and of those who attempted it, 68.7% passed it successfully.
- Of the 592 students in the cohort who took an English basic skills class, 306 (51.7%) took and passed English 042 or 043.
- A quarter (24.2%) of English basic skills students took and completed a transfer level English course, while 20.9% passed transfer level English successfully.
- English basic skills students performed at the same level as other students in associate and transfer courses.

ESOL

• ESOL students who advanced to associate level English had a completion rate of 89.1% and a success rate of 81.3%.

Persistence

- Of the 1,244 basic skills students in the Fall 2001 cohort, 690 remained in Fall 2002.
- Basic skills students who were receiving EOPS services were much more likely to persist than were other basic skills students.

San Diego Community College District

The findings reported in this study point to a sharp drop-off of students early in the math and English basic skills sequences. Only about half of the English and math basic skills students reach the point of passing the highest basic skills class in those disciplines. The fall-off of students early in the math and English sequences results in lower numbers of students reaching the higher level courses. However, the relatively high persistence rates among basic skills students suggests that this not a matter of these students disappearing quickly. Therefore, early efforts in assisting these students over these hurdles may be successful.

The findings reported in this study show how successful basic skills students have been in subsequent courses in the math, English, and ESOL course sequences. Comparisons are made in the report between basic skills students and other students in the cohort. However, it should be noted that these comparisons are only descriptive, and do not demonstrate how much of an impact the basic skills courses may have on performance in subsequent classes. A "pre-post assessment" study design would be required to illuminate the size of the effect of the basic skills courses.

Next year's report will have more cohorts and allow more refined analysis and separation by college. In addition, the relationship between students assessed at each level and success will be examined.