

## Basic Skills Proficiency, Performance, and Progress of Students at Santiago Canyon College (Fall 2008 Cohort)

### September 2010

#### **Background**

Since basic skills, or "pre-collegiate," coursework spans our college's curriculum, the RSCCD Research Department compiled data on the entire group of students to support the strategic planning of programs and services to better prepare these students for college-level coursework. For the purpose of this study, the Basic Skills Task Force identified the following pre-collegiate courses as basic skills: American College English (ACE N42, N43, 052, 053, 093, 096, 102 and 116), English (N50, N60 and 061), Math (N05, N06, N48, 060 and 080) and Reading (096 and 097). Further, only first-time freshmen (Fall 2008) are included in the sample for longitudinal tracking.

#### Summary of Findings

- About one-fifth (568 of 2750) of SCC's first-time freshmen were **advised** into basic skills (precollegiate) coursework in Fall 2008.
  - 16% (440 of 2750) of first-time freshmen actually **enrolled** in the advised coursework that semester.
- 31% (843 of 2750) of SCC's first-time freshmen enrolled in basic skills (pre-collegiate) coursework in Fall 2008.
  - Overall, the success rate (A,B,C, or credit) of students enrolled in pre-collegiate courses was 47%. About one-quarter (23%) withdrew from their pre-collegiate courses.
  - In a comparison of those enrolled in pre-collegiate courses versus those not enrolled in pre-collegiate courses, those enrolled in any level of pre-collegiate course(s) persisted in college at higher rates than those who were not (82% vs. 54% to the second semester).
  - Pre-collegiate first-time freshmen had slightly lower non-completion rates (W, I) in college-level courses than did those not enrolled in pre-collegiate courses (20% vs. 22%).
  - English 101 and Counseling 116 topped the list of most-popular college-level courses pre-collegiate students concurrently enrolled in during their first semester.
  - Far greater numbers of young adults enrolled in basic skills; most (97%) were 21 years of age or younger.

#### **Overview of Basic Skills (Pre-Collegiate) Advisements and Enrollments**

The basic skills environment at SCC can be examined from different perspectives: that of individuals in our student population who, through placement testing, multiple measures, and counselor recommendation, demonstrate the **need** to gain proficiency in the basic skills areas AND that of our students who actually **enroll** in pre-collegiate coursework—regardless of how or why they enrolled in that course. The table below offers an overview of these two populations:

Pre-Collegiate (Basic Skills) Coursework at SCC (Fall 2008)												
		Advisement to Basic Skills Coursework							Actual Enrollments (with or without advisement) in pre- collegiate coursework n=843*			
1st-Time FreshmenStudent Advised n=568*Student H n=44					l	-						
	ENG	ACE	MATH	READ	ENG	ACE	MATH	READ	ENG	ACE	MATH	READ
2750	280	35	447	138	207	4	350	19	376	40	707	62
	31%	4%	50%	15%	36%	1%	60%	3%	32%	3%	60%	5%

#### Pattern of Advisement and Enrollment into Pre-Collegiate (Basic Skills) Coursework at SCC (Fall 2008)

\* course enrollment exceeds total headcount due to enrollment in multiple subject areas

- About one-fifth (568 of 2750) of SCC's first-time freshmen were advised into basic skills (precollegiate) coursework in Fall 2008.
- 16% (440 of 2750) of first-time freshmen actually enrolled in the advised coursework that semester.
- An additional 403 first-time freshmen placed into basic skills coursework without advisement (for a combined enrollment of 843).

To further describe the proficiencies of our incoming freshmen, 45% of those students advised to enroll in pre-collegiate coursework were advised to take courses in **multiple subject areas**, as follows:

# of Subject Areas Advised Into	Advised into Pre-Collegiate Fall 2008 Coursework (n=568)
1 subject area	55%
2 subject areas	32%
3+ subject areas	13%

#### SCC First-Time Freshmen Advised to Enroll in Pre-Collegiate Coursework

It is the primary intention of this report to analyze student performance and progress towards collegelevel coursework. Therefore, all subsequent analyses will be limited to the student population who actually enrolled in basic skills courses during the Fall 2008 semester at SCC (n=843).

#### **Enrollment in Pre-Collegiate Courses at SCC**

To understand the effectiveness of current basic skills coursework at SCC, data for students who actually enrolled into these pre-collegiate courses (**regardless of advisement**) have been analyzed. Those data are as follows:

- 31% (843 of 2,750) of SCC's first-time freshmen (Fall 2008) enrolled in at least one precollegiate course.
- Nearly half of pre-collegiate students (48%) enrolled in only one basic skills course; 36% took two, and 16% took three or more pre-collegiate courses in their first semester of college.
- 84% (707 of 843) of basic skills students enrolled in math, 45% enrolled in English, 7% enrolled in reading, and 5% enrolled in ACE pre-collegiate coursework.

#### # of First-Time Freshmen Enrolled in Pre-Collegiate Coursework, Fall 2008 N=843

Total	Headcount	Percent	Subject Area	Enrollments	Percent
1 Subject Area	406	48%	ACE	40	5%
2 Subject Area	299	36%	English	376	45%
3+ Subject Area	138	16%	Math	707	84%
			Reading	62	7%

Overall, the success rate (A, B, C, or credit) of students enrolled in pre-collegiate courses was 47%.

- ACE had the highest success rate at 75%, while math and reading were both at low rate of 44%.
- Withdrawal rates were comparable across the four disciplines, ranging from 20% to 26%.

Grade Distribution of SCC Pre-collegiate Courses, Fall 2008	5
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Pre-Collegiate			Course S			concentra	Non-Success Non-Compl				npleters	
Course	# Grades Rec'd	А	В	С	CR	Rate	D	F	NC	Rate	W	Rate
ACE 052	12	1	4	4		75%				0%	3	25%
ACE 053	11		3	1		36%	2	1		27%	4	<mark>36%</mark>
ACE 093	22	5	7	6		82%				0%	4	18%
ACE 096	6	2	3		1	100%				0%		0%
ACE 102	22	2	6	8		73%	1			5%	5	23%
ACE 116	6		4	1	1	100%				0%		0%
ACE Total	79	10	27	20	2	75%	3	1		5%	16	20%
English N50	97	4	20	24		<mark>49%</mark>	11	12		24%	26	27%
English N60	238	23	47	51		51%	27	36		26%	54	23%
English 061	41	4	11	8		56%	2	2		10%	14	34%
English Total	376	31	78	83		<mark>51%</mark>	40	50		24%	94	25%
Math N05	5				4	80%				0%	1	20%
Math N06	68	5	10	12		40%	4	14		26%	23	34%
Math N48	163	21	28	26		46%	15	24		24%	49	30%
Math 060	470	16	39	44	105	43%	41	41	114	42%	70	15%
Math 080	210	19	28	43		43%	16	38		26%	66	<b>31%</b>
Math Total	916	61	105	125	109	44%	76	117	114	34%	209	23%
Reading 096	33		4	7		33%	4	11		<b>45%</b>	7	<b>21%</b>
Reading 097	29	6	6	4		55%	2	2		14%	9	<u>31%</u>
Reading Total	62	6	10	11		44%	6	13		31%	16	26%
All Pre-Collegiate	1433	108	220	239	111	47%	125	181	114	<mark>29%</mark>	335	23%

#### Semester-to-Semester Persistence

Another indicator of success is the length of time students continue (persist) in college. In a comparison of those enrolled in pre-collegiate courses versus those not enrolled in pre-collegiate courses, those enrolled in any level of pre-collegiate courses persisted at higher rates than those who are not. Additionally,

- Fall 2008 first-time freshmen enrolled in pre-collegiate courses persisted to subsequent semesters at a high rate: 82% to a second semester, 68% to a 3<sup>rd</sup> semester, and 60% to a 4<sup>th</sup> semester. Persistence rates were even higher for pre-collegiate students who were successful in at least one pre-collegiate course in their first semester (92%, 83%, and 75% respectively).
- Fall 2008 first-time freshmen who were **not** enrolled in pre-collegiate courses persisted at significantly lower rates of 54 % to a 2<sup>nd</sup> semester, 38% to a 3<sup>rd</sup> semester and 36% to a 4<sup>th</sup> semester. It is important to note that the majority of the non-pre-collegiate group had educational goals related to employment, which may entail a one-semester length of study.
- Semester-to-semester persistence rates by those who had successful pre-collegiate coursework were comparable across the four disciplines (ranging from 95% to 59%); however, pre-collegiate students who successfully completed their ACE classes experienced the largest decline in persistence rates from 3<sup>rd</sup> to 4<sup>th</sup> semester (-19 percentage points).

#### Semester to Semester Persistence Comparison of Those Enrolled in Pre-Collegiate Courses vs. Not Enrolled in Pre-Collegiate Courses Fall 2008 First-Time Freshmen

	Ν	2 <sup>nd</sup> Semester	3 <sup>rd</sup> Semester	4 <sup>th</sup> Semester
First-time Freshmen Not Enrolled in Pre-Collegiate Courses	1907	54%	38%	36%
First-time Freshmen Enrolled in a Pre-Collegiate Course	843	82%	68%	60%
Successful in at Least 1 Pre-Collegiate Course	436	92%	83%	75%
Successful in ACE Pre-Collegiate Course	32	88%	78%	59%
Successful in English Pre-Collegiate Course	192	95%	86%	78%
Successful in Math Pre-Collegiate Course	327	92%	84%	77%
Successful in Reading Pre-Collegiate Course	27	96%	81%	78%

#### Performance in Concurrent College-Level Coursework

Most students do not have the luxury of time where they can concentrate on perfecting their basic skills coursework before taking college-level courses. In fact, 90% (757 of 843) of the Fall 2008 first-time pre-collegiate freshmen were concurrently enrolled in college-level courses (defined as 100+ and transferrable to four-year universities) during their first semester in college.

- They took a total of 185 different college-level courses, ranging from the arts to science and English courses. The top 12 courses taken by pre-collegiate students are listed below. Of these, course success ranges from a low of 42% in Art 100 to a high of 80% for Music 101.
- Pre-collegiate students concurrently enrolled in a collective 1,869 college-level classes in their first semester versus 3,563 classes enrolled by their non pre-collegiate freshmen.
- Overall, both pre-collegiate and non pre-collegiate students had the same success rate of 59% in college-level courses; pre-collegiate students had slightly lower withdrawal rates than the non-pre-collegiate students (20% vs. 22%).

**College-Level Courses Concurrently Enrolled in by Pre-Collegiate Students** 

(First-time Freshmen), Fall 2008						
	Enro	Enrollment				
College-Level Courses	Count N=757	Percent	(grade of A,B,C,Cr)			
English 101	245	29%	58%			
Counseling 116	212	25%	74%			
Psychology 100	107	13%	48%			
Political Science 101	65	8%	60%			
Study Skills 109	57	7%	79%			
Criminal Justice 101	52	6%	44%			
Television/Video Comm. 104	39	5%	62%			
Art 100	38	5%	42%			
Communication 100	37	4%	57%			
Human Development 107	36	4%	56%			
Music 101	35	4%	80%			
Exercise Science 131	35	4%	54%			

Comparison of Grades Received in College-Level Courses Concurrently Enrolled Pre-Collegiate Students vs. Non-Pre-Collegiate Students								
	]	Fall 2008 Cours	e Completion					
	# of Grades Rec'd in College-Level Courses	Success (A,B,C,CR)	Non-Success (D,F,NC)	Non- Completion (W,I)				
<b>Pre-Collegiate Students</b>								
ACE (n=28)	38	74%	5%	21%				
English (n=338)	731	59%	21%	20%				
Math (n=641)	1568	60%	21%	19%				
Reading (n=50)	76	62%	16%	22%				
Total	1869	59%	21%	20%				
Non-Pre-Collegiate	3563	59%	19%	22%				

#### Performance in College-Level Coursework Subsequent to Pre-Collegiate Course Success

Nearly all (425 of 436) of those first-time pre-collegiate freshmen who successfully completed their precollegiate course continued on to enroll in college-level coursework in subsequent semesters (Spring 2009, Fall 2009 and Spring 2010). Has the pre-collegiate course(s) helped them in their college-level coursework?

- These students took 3,914 classes; English 101, Biology 109 and Political Science 101 topped the list of 326 college-level courses the pre-collegiate students enrolled.
- The top 12 courses taken by pre-collegiate students are listed below (along with the success rates of each class). At least 80% of the students enrolled in Music 101, Communication 100, Counseling 116 and English 103 were successful (grades of A, B, C, or Credit). Other courses had success rates of 50% or higher.
- Both pre-collegiate and non pre-collegiate students' success rates in college-level courses were comparable (66% vs. 69% respectively).

Performance in College-Level Coursework Subsequent to Pre-Collegiate Course Success

(Fall 2008 Cohort)						
	Enro	% Successful				
	Count N=425	Percent	(grade of A,B,C,Cr)			
English 101	263	62%	59%			
Biology 109	202	48%	50%			
Political Science 101	182	43%	72%			
Music 101	115	27%	88%			
Psychology 100	111	26%	51%			
Communication 100	95	22%	83%			
Counseling 116	89	21%	82%			
Math 140	84	20%	55%			
Philosophy 106	78	18%	64%			
History 120	76	18%	54%			
Art 100	72	17%	58%			
English 103	71	17%	82%			

Comparison of Grades Received in College-Level Courses in Subsequent Semesters							
Successful Pre-Collegiate Students vs. Non-Pre-Collegiate Students							
	Spring 2009-Spring 2010 College-Level Course Completion						
	# of Grades Rec'd	Success (A,B,C,CR)	Non-Success (D,F,NC)	Non-Completion (W,I)			
Pre-Collegiate Students (Fall 2	2008 Cohort)						
ACE	142	64%	12%	24%			
English	1568	64%	17%	19%			
Math	2812	68%	14%	18%			
Reading	179	51%	22%	27%			
Total	3914	66%	15%	19%			
Non-Pre-Collegiate Students	7651	69%	14%	17%			

#### Performance in English Skills Coursework Subsequent to Pre-Collegiate English Course Success

Nearly all (185 of 192) of those first-time pre-collegiate freshmen who successfully completed their precollegiate English course (includes N50, N60 and 061) continued on to enroll in college-level coursework in subsequent semesters. To see if their success in pre-collegiate English course has helped, we looked at other college-level courses that required English skills. The list below identified the 14 courses with the highest enrollment of pre-collegiate English students of our Fall 2008 cohort.

- In subsequent semesters, Spring 2009 through Spring 2010, successful English pre-collegiate students enrolled in 295 courses across a wide variety of subject areas. The top 14 English skills related courses taken by pre-collegiate students are listed below.
- English 101, Biology 109 and Political Science 101 topped the list of the most popular English skills courses students enrolled in after successfully completing a pre-collegiate English course.
- With the exception of the science courses (which may require other skills), pre-collegiate English students had success rates bordering 60% or higher.
- Success rates for those who progressed to English courses include: 57% in English 061, 70% in English N60, and a high 83% in English 103.

•	Overall, pre-collegiate English cohort had an overall 63% success rate in ALL courses.
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Performance in English Skills Coursework Subsequent to Pre-Collegiate English Course Success (Fall 2008 Cohort)					
English Skills Related Courses	Enr	% Successful (grade of			
	Count	Percent	A,B,C,Cr)		
English 101	165	89%	62%		
Biology 109	88	48%	45%		
Political Science 101	85	46%	65%		
English 061	65	35%	57%		
Psychology 100	49	26%	57%		
Music 101	45	24%	89%		
Communication 100	37	20%	84%		
Astronomy 110	35	19%	49%		
Philosophy 106	35	19%	63%		
Earth Science 110	30	16%	43%		
History 120	30	16%	47%		
English 103	29	16%	83%		
Sociology 100	26	14%	85%		
English N60	25	12%	70%		
Successfully completed pre- collegiate English and enrolled in subsequent semesters (Spring	185		63%		
2009-Spring 2010)					

#### Performance in Mathematical Skills Coursework Subsequent to Pre-Collegiate Math Course Success

The majority of pre-collegiate students (84%) at SCC needed additional assistance in the area of math; therefore, it was also important to track this group to see how they perform in subsequent courses requiring mathematical and reasoning skills.

- 306 pre-collegiate math students took 375 courses following their success in pre-collegiate math • course and had an overall success rate of 64% in ALL coursework.
- The top 12 math skills related courses are listed below. It contains mostly math courses; thereby, • informing us that students are not ready to enroll in courses with math as prerequisites. Success rates in these classes range from a low 36% in Math 080 to a high 67% in Philosophy 106 and Math 105.
- Introductory math courses (Math 080 and 060) were predominant among pre-collegiate students' • subsequent coursework. Success rates for these classes are a low 36% in Math 080 (minimum math requirement for an AA/AS degree) to a high 60% in Math 060.

Made Statte Data d C	Enr	% Successful	
Math Skills Related Courses	Count	Percent	(grade of A,B,C,Cr)
Math 080	211	69%	36%
Math 060	208	68%	60%
Math N98	84	27%	62%
Math 140	69	23%	55%
Philosophy 106	58	19%	67%
Math 083	49	16%	57%
Math 219	48	16%	44%
Math 105	36	12%	67%
Computer 100	35	11%	66%
Economics 120	35	11%	31%
Math 048	26	8%	58%
Math 160	22	7%	36%
Successfully completed pre- collegiate math and enrolled in subsequent semesters (Spring 2009- Spring 2010)	306		64%

# Performance in Mathematical Skills Coursework Subsequent to

#### **Demographics and Student Characteristics**

- The proportions of students who enrolled in pre-collegiate coursework versus those who did not were similar in terms of gender and ethnicity. However, far greater numbers of young adults enrolled in basic skills; most (97%) were 21 years of age or younger.
- The largest group of students (64%) enrolled in pre-collegiate coursework intended to transfer to a four-year college and/or obtain an AA/AS degree (vs. 39% in non pre-collegiate students).
- As non pre-collegiate cohort is somewhat older than pre-collegiate students, their educational goal is also different in that they are more likely to take courses to enhance their employment opportunities (35% vs. 8%).

First-Time Freshmen Demographics by Pre-Collegiate/Basic Skills Enrollment, Fall 2008												
	Not Enrolled in a Pre- Collegiate Course (n=1,907)		Enrolled in a Pre-Collegiate Course Enrollment by Subject Area, Fall 2								)08	
			Pre-Collegiate Course (unduplicated) (n=843)		Enrolled in ACE Pre-Coll. Courses (n=40)		Enrolled in Math Pre-Coll. Courses (n=707)		Enrolled in English Pre-Coll. Courses (n= 376)		Enrolled in Reading Pre-Coll. Courses (n=62)	
	#	%	#	%	#	%	#	%	#	%	#	%
Gender												
Male	1218	64%	436	52%	16	40%	366	52%	202	54%	26	42%
Female	689	36%	407	48%	24	60%	341	48%	174	46%	36	58%
Ethnicity												
African-American	46	2%	11	1%	0	0%	9	1%	3	1%	0	0%
Asian	138	7%	47	6%	5	13%	41	6%	17	5%	4	7%
Latino	917	48%	370	44%	34	85%	296	42%	197	52%	47	76%
Caucasian	656	34%	340	40%	0	0%	301	43%	127	34%	6	10%
Other	74	4%	48	6%	0	0%	37	5%	21	6%	3	5%
Decline to state	76	4%	27	3%	1	3%	23	3%	11	3%	2	3%
Age												
17 and under	233	12%	163	19%	5	13%	143	20%	64	17%	12	19%
18-21	954	50%	658	78%	28	70%	550	78%	308	82%	50	81%
22-29	308	16%	13	2%	1	3%	10	1%	3	1%	0	0%
30-39	197	10%	7	1%	6	15%	3	<1%	0	0%	0	0%
40 and over	215	11%	2	<1%	0	0%	1	0%	1	<1%	0	0%
<b>Educational Goal</b>												
Vocational Cert.	94	5%	16	2%	1	2%	13	2%	9	2%	3	5%
Employment Crse	662	35%	71	8%	2	5%	52	7%	34	9%	8	13%
Transfer	206	11%	172	20%	9	23%	151	21%	70	19%	6	10%
AA/AS Degree	529	28%	372	44%	12	30%	312	44%	169	45%	22	35%
4yr Univ Student	67	4%	14	2%	0	0%	12	2%	8	2%	0	0%
Personal Interest	55	3%	8	1%	1	2%	6	1%	4	1%	0	0%
Improve basic sk.	11	1%	4	1%	1	2%	3	<1%	0	0%	0	0%
Maintain License	25	1%	12	1%	0	0%	12	2%	5	1%	1	2%
Undecided	230	12%	169	20%	13	33%	141	20%	76	20%	21	34%
Other	28	1%	5	1%	1	2%	5	1%	1	<1%	1	2%