



Basic Skills Proficiency, Performance, and Progress of Students at Santiago Canyon College (Fall 2009 Cohort)

July 2011

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 Fall 2009 first-time freshmen (n=1972) are included in the sample for longitudinal tracking.

Summary of Findings

- 62% (n=1216) of SCC’s Fall 2009 first-time freshmen were administered placement test(s) for math, English and ACE.
- About three-quarters (938 of 1216) of those tested were **advised** into basic skills (pre-collegiate) coursework in Fall 2009.
 - 51% (620 of 1216) of tested freshmen actually **enrolled** in the advised coursework that semester.
- 40% (781 of 1972) of SCC’s first-time freshmen enrolled in basic skills (pre-collegiate) coursework in Fall 2009 (with or without advisement).
 - Overall, the success rate (A,B,C, or P) of students enrolled in pre-collegiate courses was 54%. About one-quarter (22%) withdrew from their pre-collegiate courses.
 - Students enrolled in pre-collegiate course(s) (at any level) persisted to a second semester at higher rates than those who were not (83% vs. 60%) enrolled in pre-collegiate courses.
 - English 101 and Political Science 101 topped the list of most-popular college-level courses pre-collegiate students concurrently enrolled in during their first semester.
 - Most (97%) pre-collegiate students were 21 years of age or younger (compared to 77% of all first-time freshman).

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:

**Pattern of Advisement and Enrollment into
Pre-Collegiate (Basic Skills) Coursework at SCC (Fall 2009)**

1 st -Time Freshmen	Advisement to Basic Skills Coursework								Actual Enrollments (with or without advisement) in pre-collegiate coursework n=781 hc/1125 enr*			
	Students Advised n=938 hc/1459 enr*				Students Enrolled n=620 hc/833 enr*							
	ENG	ACE	MATH	READ	ENG	ACE	MATH	READ	ENG	ACE	MATH	READ
1972	389	33	852	185	253	16	520	44	303	61	670	91
	41%	4%	91%	20%	41%	3%	84%	7%	39%	8%	86%	12%

* course enrollment (enr) exceeds total headcount (hc) due to enrollment in multiple subject areas

- About three-quarters (938 of 1216) of SCC's first-time freshmen tested were advised into basic skills (pre-collegiate) coursework in Fall 2009.
- 51% (620 of 1216) of first-time freshmen tested actually enrolled in the advised coursework that semester.
- An additional 161 first-time freshmen enrolled in basic skills coursework without advisement (for a combined headcount of 781), with 1125 enrollment due to multiple subject areas.

To further describe the proficiencies of our incoming freshmen, 41% of those students advised to enroll in pre-collegiate coursework were advised to take courses in **multiple subject areas**, as follows:

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

# of Subject Areas Advised Into	Advised into Pre-Collegiate Fall 2009 Coursework (n=938)
1 subject area	59%
2 subject areas	27%
3+ subject areas	14%

It is the primary intention of this report to analyze student performance and progress towards college-level coursework. Therefore, all subsequent analyses will be limited to the student population who **actually enrolled in pre-collegiate courses** during the Fall 2009 semester at SCC (n=781).

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:

- 40% (781 of 1972) of SCC's first-time freshmen (Fall 2009) enrolled in at least one pre-collegiate course.
- Nearly two-thirds of pre-collegiate students (65%) enrolled in only one basic skills course; 26% took two, and 8% took three or more pre-collegiate courses in their first semester of college.
- 86% (670 of 781) of pre-collegiate students enrolled in math, 39% enrolled in English, 12% enrolled in reading, and 4% enrolled in ACE pre-collegiate coursework.

of First-Time Freshmen Enrolled in Pre-Collegiate Coursework, Fall 2009

N=781

Total	Headcount	Percent
1 Subject Area	511	65%
2 Subject Area	206	26%
3+ Subject Area	64	8%
Total	781	

Subject Area	Headcount	Percent
ACE	31	4%
English	303	39%
Math	670	86%
Reading	90	12%

Overall, the success rate (A, B, C, or credit) of students enrolled in pre-collegiate courses was 54%.

- ACE had the highest success rate at 66%, while math had the lowest (50%).
- Withdrawal rates were comparable, ranging from 20% (math) to 24% (reading).

Grade Distribution of SCC Pre-collegiate Courses, Fall 2009

Pre-Collegiate Course	Course Success						Non-Success				Non-Completers	
	# Grades Rec'd	A	B	C	P	Rate	D	F	NP	Rate	W	Rate
ACE N42	2	0	0	0	2	100%	0	0		0%	0	0%
ACE N43	2	0	0	0	2	100%	0	0		0%	0	0%
ACE 052	14	0	4	5	0	64%	1	0		7%	4	29%
ACE 053	14	1	7	2	0	71%	0	0		0%	4	29%
ACE 081	9	0	5	0	0	56%	2	0		22%	2	22%
ACE 093	8	2	3	1	0	75%	0	1		13%	1	13%
ACE 102	8	0	2	3	0	63%	2	1		38%	0	0%
ACE 116	4	0	1	0	0	25%	0	0		0%	3	75%
ACE Total	61	3	22	11	4	66%	5	2		11%	14	23%
English N50	39	6	10	6		56%	2	6		21%	9	23%
English N60	74	8	25	16		66%	7	8		20%	10	14%
English 061	190	7	55	47		57%	15	23		20%	43	23%
English Total	303	21	90	69		59%	24	37		20%	62	20%
Math N05	7	0	0	0	5	71%	0	0	2	29%	0	0%
Math N06	62	5	14	11	0	48%	9	12	0	34%	11	18%
Math N48	162	12	31	44	0	54%	17	28	0	28%	30	19%
Math 060	234	22	45	44	0	47%	39	27	0	28%	57	24%
Math 080	205	20	40	42	0	50%	21	25	0	22%	56	27%
Math Total	670	59	130	141	5	50%	86	92	2	27%	154	23%
Reading 096	48	2	18	9		60%	6	1		15%	12	25%
Reading 097	43	4	12	4		47%	3	10		30%	10	23%
Reading Total	91	6	30	13		54%	9	11		22%	22	24%
All Pre-Collegiate	1125	89	272	234	9	54%	124	142	2	24%	252	22%

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 (at least 20% differences for any given semester). Additionally,

- Fall 2009 first-time freshmen enrolled in pre-collegiate courses persisted to subsequent semesters at a high rate: 83% to a second semester, 67% to a 3rd semester, and 62% to a 4th semester. Persistence rates were even higher for pre-collegiate students who were successful in at least one pre-collegiate course in their first semester (94%, 79%, and 73% respectively).
- Fall 2009 first-time freshmen who were **not** enrolled in pre-collegiate courses persisted at significantly lower rates of 60 % to a 2nd semester, 45% to a 3rd semester and 42% to a 4th semester. It is important to note that the majority of the non-pre-collegiate group had educational goals related to employment, which may have been achieved in a single semester.
- Semester-to-semester persistence rates of those who succeeded in pre-collegiate coursework were comparable across the three disciplines (math, English, reading); however, ACE pre-collegiate students were not as high. Pre-collegiate ACE students also experienced the largest decline in persistence rates from 2nd to 4th semester (-27 percentage points).

Semester to Semester Persistence Comparison of Those Enrolled in Pre-Collegiate Courses vs. Not Enrolled in Pre-Collegiate Courses Fall 2009 First-Time Freshmen

	N	2 nd Semester	3 rd Semester	4 th Semester
First-time Freshmen Not Enrolled in Pre-Collegiate Courses	1191	60%	45%	42%
First-time Freshmen Enrolled in a Pre-Collegiate Course	781	83%	67%	62%
Successful in at Least 1 Pre-Collegiate Course	452	94%	79%	73%
Successful in ACE Pre-Collegiate Course	22	86%	73%	59%
Successful in English Pre-Collegiate Course	180	96%	82%	79%
Successful in Math Pre-Collegiate Course	335	94%	80%	76%
Successful in Reading Pre-Collegiate Course	49	98%	86%	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, 91% (707 of 781) of the Fall 2009 first-time pre-collegiate freshmen were concurrently enrolled in college-level courses (designated as 100+) during their first semester in college.

- They took a total of 168 different college-level courses, ranging from the arts to science courses. The top 16 courses taken by pre-collegiate students are listed below. Of these, course success ranges from a low of 46% in both Criminal Justice 101 and Biology 109 to a high of 86% for Counseling 113.
- Pre-collegiate students concurrently enrolled in a collective 1718 college-level classes in their first semester versus 2638 classes enrolled by their non pre-collegiate freshmen.
- Overall, both pre-collegiate and non pre-collegiate students had the same success rate of 63% in college-level courses.

College-Level Courses Concurrently Enrolled Pre-Collegiate Students vs. Non-Precollegiate Students (First-time Freshmen), Fall 2009				
College-Level Courses	Basic Skills Enrollment			% Success of Non-Basic Skills Students
	Count N=707	Percent	% Successful (grade of A,B,C,P)	
English 101	288	41%	60%	70%
Counseling 116	130	18%	79%	74%
Counseling 101	77	11%	81%	100%
Psychology 100	72	10%	54%	64%
Political Science 101	56	8%	70%	74%
Counseling 113	43	6%	86%	100%
Communication 100	39	6%	80%	76%
Exercise Science 131	39	6%	48%	57%
Criminal Justice 101	37	5%	46%	51%
Art 100	31	4%	61%	71%
Music 101	30	4%	63%	76%
Philosophy 106	28	4%	68%	63%
Television 104	25	4%	80%	86%
Biology 109	24	3%	46%	45%
Reading 150	24	3%	83%	92%
Sociology 100	23	3%	65%	60%

Comparison of Grades Received in College-Level Courses Concurrently Enrolled Pre-Collegiate Students vs. Non-Pre-Collegiate Students				
Fall 2009 Course Completion				
	# of Grades Rec'd in College-Level Courses	Success (A,B,C,P)	Non-Success (D,F,NP)	Non- Completion (W,I)
Pre-Collegiate Students				
ACE (n=31)	31	52%	23%	26%
English (n=303)	533	59%	21%	20%
Math (n=670)	1511	64%	19%	17%
Reading (n=90)	86	69%	23%	8%
Total	1718	63%	19%	17%
Non-Pre-Collegiate	2638	63%	17%	19%

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

Nearly all (422 of 452) of those first-time pre-collegiate freshmen who successfully completed their pre-collegiate course(s) continued on to enroll in college-level coursework in subsequent semesters (Spring 2010, Fall 2010 and Spring 2011). Has the pre-collegiate course(s) helped them in their college-level coursework?

- These students took 3714 classes; English 101, Political Science 101 and Psychology 100 topped the list of 307 college-level courses the pre-collegiate students enrolled.
- Success rates for the top 15 courses taken by pre-collegiate students are listed below. At least 82% of the students enrolled in Music 101, Communication 100 and Counseling 116 were successful (grades of A, B, C, or Pass). Success rates in other courses varied widely.
- Pre-collegiate and non pre-collegiate students' success rates in college-level courses were comparable (69% vs. 70%, respectively).

Performance in College-Level Coursework Subsequent to Pre-Collegiate Course Success (Fall 2009 Cohort)				
College-Level Courses	Spring 2010-2011			
	Basic Skills Students		Basic Skills Students	
	Number of Enrollments	Number of Enrollments	Number of Enrollments	Number of Enrollments
English 101	240	56%	231	60%
Political Science 101	183	69%	239	62%
Psychology 100	129	59%	174	59%
Communication 100	114	83%	91	86%
Music 101	108	88%	153	85%
Biology 109	95	58%	161	68%
Math 140	85	54%	51	47%
English 103	69	75%	89	76%
Math 105	69	74%	28	64%
Earth Science 110	66	71%	59	56%
Sociology 100	65	74%	96	77%
History 120	62	48%	90	56%
Philosophy 106	62	61%	121	68%
Astronomy 109	60	45%	61	66%
Counseling 116	60	82%	125	66%

Comparison of Grades Received in College-Level Courses in Subsequent Semesters Successful Pre-Collegiate Students vs. Non-Pre-Collegiate Students				
	Spring 2010-Spring 2011 College-Level Course Completion			
	# of Grades Rec'd	Success (A,B,C,P)	Non-Success (D,F,NP)	Non-Completion (W,I)
Pre-Collegiate Students (Fall 2009 Cohort)				
ACE	125	67%	17%	16%
English	1390	64%	19%	18%
Math	2721	73%	13%	14%
Reading	334	66%	18%	16%
Total	3513	70%	15%	15%
Non-Pre-Collegiate Students	5706	69%	14%	17%

Performance in Courses with English Content Subsequent to Pre-Collegiate English Course Success

Nearly all (177 of 180) of those first-time pre-collegiate freshmen who successfully completed pre-collegiate English courses (includes N50, N60 and 061) continued on to enroll in college-level coursework in subsequent semesters. Transcripts were analyzed to determine if pre-collegiate English course success enhances success in other courses. The list below identifies 12 courses in which English proficiency is key and have the highest enrollment (Spring 2010 thru Spring 2011) of pre-collegiate English students of our Fall 2009 cohort.

- English 101, English 061 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.
- Success rates for those who progressed to English courses include: 58% in English 101, 69% in English 061, 67% in English 103 and 68% in English N60.
- Pre-collegiate English cohort students had an overall 62% success rate in all course enrollments compared to 67% success rate of no-pre-collegiate students' enrollment.

Performance in Courses with English Content Subsequent to Pre-Collegiate English Course Success Successful Basic Skills English Students vs. Non-Basic Skills Students (Fall 2009 Cohort)				
Courses with English Content	Spring 2010-2011			
	Basic Skills Students		Basic Skills Students	
	Number of Enrollments	Number of Enrollments	Number of Enrollments	Number of Enrollments
English 101	159	58%	219	61%
English 061	73	69%	-	-
Political Science 101	55	62%	211	65%
Psychology 100	48	50%	164	58%
Music 101	39	80%	139	86%
Communication 100	38	87%	79	86%
Biology 109	32	47%	158	67%
English N60	25	68%	-	-
Communication 110	24	71%	72	74%
Television 104	23	65%	67	82%
English 103	21	67%	85	77%
History 120	20	15%	79	57%
All Subsequent Coursework	N=177	62%	N=830	67%

Performance in Math Courses Subsequent to Pre-Collegiate Math Course Success

The majority of pre-collegiate students (86%) 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 math courses.

- 322 successful pre-collegiate math students subsequently enrolled in a wide variety of courses (304 across three semesters of study) and had an overall success rate of 69%.
- The most highly-enrolled math courses are listed below. Comprised mostly math courses; it is clear that additional math skills are needed to meet math prerequisites. Success rates in these classes range from a low 32% in Math 160 to a high 100% in Astronomy 140.
- Introductory math courses (Math 060 and 080) were predominant among pre-collegiate students' subsequent coursework. Success rates for these classes are 43% in Math 060 and 44% in Math 80.
- Pre-collegiate math cohort has an overall success rate of 69% in all course enrollments versus 67% success rate for non-pre-collegiate students. From the list below, there are some classes that students with pre-collegiate experience outperform those without pre-collegiate experience.

Performance in Math Courses Subsequent to Pre-Collegiate Math Course Success Successful Basic Skills Math Students vs. Non-Basic Skills Students (Fall 2009 Cohort)				
Math Coursework	Spring 2010-2011			
	Basic Skills Students		Basic Skills Students	
	Number of Enrollments	Number of Enrollments	Number of Enrollments	Number of Enrollments
Math 081	110	36%	-	-
Math 080	94	44%	-	-
Math 140	72	54%	48	44%
Math 105	63	73%	25	64%
Math 219	40	40%	67	67%
Math 160	19	32%	38	58%
All Subsequent Coursework	N=322	69%	N=830	67%

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 (74%) enrolled in pre-collegiate coursework intended to transfer to a four-year college and/or obtain an AA/AS degree (vs. 52% in non pre-collegiate students).
- As the 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 or to maintain their license (20% vs. 2%).

First-Time Freshmen Demographics by Pre-Collegiate/Basic Skills Enrollment, Fall 2009												
	Not Enrolled in a Pre-Collegiate Course (n=1191)		Enrolled in a Pre-Collegiate Course (unduplicated) (n=781)		Pre-Collegiate Course Enrollment by Subject Area, Fall 2009							
					Enrolled in ACE Pre-Coll. Courses (n=31)		Enrolled in Math Pre-Coll. Courses (n=670)		Enrolled in English Pre-Coll. Courses (n= 303)		Enrolled in Reading Pre-Coll. Courses (n=90)	
	#	%	#	%	#	%	#	%	#	%	#	%
Gender												
Male	752	63%	383	49%	15	48%	320	48%	155	51%	50	56%
Female	439	37%	398	51%	16	52%	350	52%	148	49%	40	44%
Ethnicity												
African-American	30	3%	5	1%	-	0%	5	1%	2	1%	-	0%
Asian	96	8%	33	4%	2	6%	25	4%	13	4%	4	4%
Latino	358	30%	206	26%	12	39%	169	25%	103	34%	31	34%
Caucasian	459	39%	281	36%	5	16%	257	38%	80	26%	9	10%
Other	36	3%	10	1%	1	3%	9	1%	1	0%	-	0%
Decline to state	212	18%	246	31%	11	35%	205	31%	104	34%	46	51%
Age												
17 and under	26	2%	6	1%	-	0%	6	1%	-	0%	-	0%
18-21	743	62%	748	96%	24	77%	647	97%	296	98%	88	98%
22-29	163	14%	16	2%	1	3%	12	2%	5	2%	1	1%
30-39	114	10%	8	1%	3	10%	5	1%	2	1%	1	1%
40 and over	145	12%	3	0%	3	10%	-	0%	-	0%	-	0%
Educational Goal												
Vocational Cert.	112	9%	6	1%	4	13%	5	1%	1	0%	1	1%
Employment Crse	139	12%	14	2%	3	10%	25	4%	3	1%	2	2%
Transfer	112	9%	59	8%	2	6%	169	25%	22	7%	6	7%
AA/AS Degree	516	43%	519	66%	11	35%	257	38%	200	66%	46	51%
4yr Univ Student	22	2%	16	2%	-	0%	9	1%	3	1%	1	1%
Personal Interest	19	2%	3	0%	-	0%	173	26%	1	0%	-	0%
Improve basic sk.	18	2%	3	0%	-	0%	-	0%	1	0%	-	0%
Maintain License	95	8%	-	0%	-	0%	-	0%	-	0%	-	0%
Undecided	133	11%	140	18%	9	29%	-	0%	62	20%	27	30%
Other	25	2%	21	3%	2	6%	32	5%	10	3%	7	8%