

El Camino College

Assessment Test Results

New Students from High School, Fall 2007 to Fall 2011

This report displays course placement rates and numbers for new high school graduate-aged students entering El Camino College (ECC) over 5 years. Because graduation date information is not complete and new students to El Camino College can be of any age, the “direct from high school” cohort is approximated as students aged 17 or 18 with a recent test score. The report includes results for these fall-enrolled students, who represent a little over half of all examinees who enroll in fall.

Assessment tests are offered in 5 subjects at ECC: Reading, Writing, Mathematics, Chemistry and English as a Second Language (ESL). The Math test consists of 3 different levels: Arithmetic, Elementary Algebra and College-Level Math. Students are diverted to different levels of the math test depending on early pre-test questions and on performance following a computer-adaptive model. The Chemistry Test (California Chemistry Diagnostic Test) is a paper and pencil test that is used to place students into the appropriate transfer-level chemistry course, provided they also meet a math prerequisite. The ESL assessment places students into listening/speaking, reading and writing courses.

Table 1 highlights the number of students, regardless of age, taking each test between March 1 and the September census date of each year listed. Students repeating the same test are counted only once in the unduplicated counts. These test counts typically mirror fluctuations in college enrollment. The number of tests decreased in 2011 following a steady 4-year increase. This decline is likely due to a decrease in enrollments at the main Torrance campus. Table 1 includes all tests administered at both ECC and Compton Center, but “tested students enrolled” (last row) represent only those enrolled at the main Torrance campus. Although there was a considerable decrease in “students tested” in 2011, the number of “tested students enrolled” decreased slightly but remained fairly stable.

Table 1: Number of Students Taking Placement Tests by Subject, March-September

Test	Subject	Number of Students Taking Each Test or Level *				
		2007	2008	2009**	2010	2011
Reading Comprehension	Reading	7,706	8,506	9,219	9,489	8,606
Sentence Skills	Writing	7,703	8,491	9,196	9,481	8,604
Arithmetic	Math	5,629	6,326	6,593	6,883	6,365
Elementary Algebra	Math	7,707	8,684	9,242	9,635	8,818
College-Level Math	Math	1,872	2,061	2,289	2,380	2,097
Chemistry	Chemistry	88	113	98	92	87
English as a Second Language	ESL	374	575	259	547	499
Total Tests (duplicated)		31,079	34,756	36,896	38,507	35,076
Students Tested (unduplicated)		9,504	10,621	11,633	11,431	10,272
Tested Students Enrolled in Fall		5,326	5,668	5,625	4,992	4,710

* Repeats of the same test by the same student have been excluded.

** Slight changes in cut scores within the college-prep and basic skills math categories in Fall 2009.

RESULTS

The Reading, Writing and Mathematics tests place students in a variety of levels depending on test performance. For this study, placements are grouped into categories of similarly-leveled courses. These groups are 1) transfer-level—courses that are equivalent to courses at a 4-year institution, 2) college-preparatory—courses that immediately precede transfer-level courses, and 3) basic skills—courses defined by El Camino College as basic skills courses (in most cases, more than one level below transfer). The specific ECC courses within each group and their levels below transfer level are listed in the appendix of this report.

Placement results for the 5 years in this study are summarized below in Table 2 by number and percentage in each subject and course group. Charts tracking the placement percentages and numbers of each begin on page 3.

Overall, Fall 2011 showed a stable rate of transfer-level Writing placements, but Math and Reading placements had rates similar to those seen in 2009. Placement numbers overall exhibited a decreasing trend, which is likely a result of decreased student enrollment counts.

Table 2: Assessment Test Results by Test and Course Group* for “New Freshmen”

Test	2007 (n=2,879)		2008 (n=3,215)		2009 (n=2,970)		2010 (n=2,629)		2011 (n=2,478)	
	N	%	N	%	N	%	N	%	N	%
Reading **										
Transfer-level	1,085	39.5	1,215	40.0	1,281	45.9	1,220	49.2	1,095	46.3
College-prep	640	23.3	700	23.1	637	22.8	543	21.9	543	23.0
Basic Skills	1,024	37.2	1,121	36.9	871	31.2	719	29.0	725	30.7
Total	2,749		3,036		2,789		2,482		2,363	
Writing **										
Transfer-level	896	32.5	975	32.1	1,061	38.0	987	39.8	955	40.4
College-prep	1,433	52.0	1,587	52.2	1,357	48.7	1,208	48.7	1,129	47.8
Basic Skills	425	15.4	476	15.7	371	13.3	287	11.6	280	11.8
Total	2,754		3,038		2,789		2,482		2,364	
Math										
Transfer-level	213	7.9	272	8.9	269	9.8	253	10.1	236	9.9
College-prep	1,502	55.8	1,705	55.7	1,540	56.4	1,481	59.0	1,364	57.1
Basic Skills	976	36.3	1,084	35.4	923	33.8	777	30.9	788	33.0
Total	2,691		3,061		2,732		2,511		2,388	

Note: The “N” figures at the top represent the total number of students aged 17 or 18 who took assessment tests between March 1 and the September census date in the year noted.

* Specific courses under each “Course Group” are listed in the Appendix of this report.

** Transfer-level placements for Reading and Writing reflect only that portion of the test, and thus, general preparation in reading and writing only. To qualify for enrollment in English 1A, examinees must achieve a qualifying score on both the Reading and Writing portions of the assessment test (see page 11).

READING

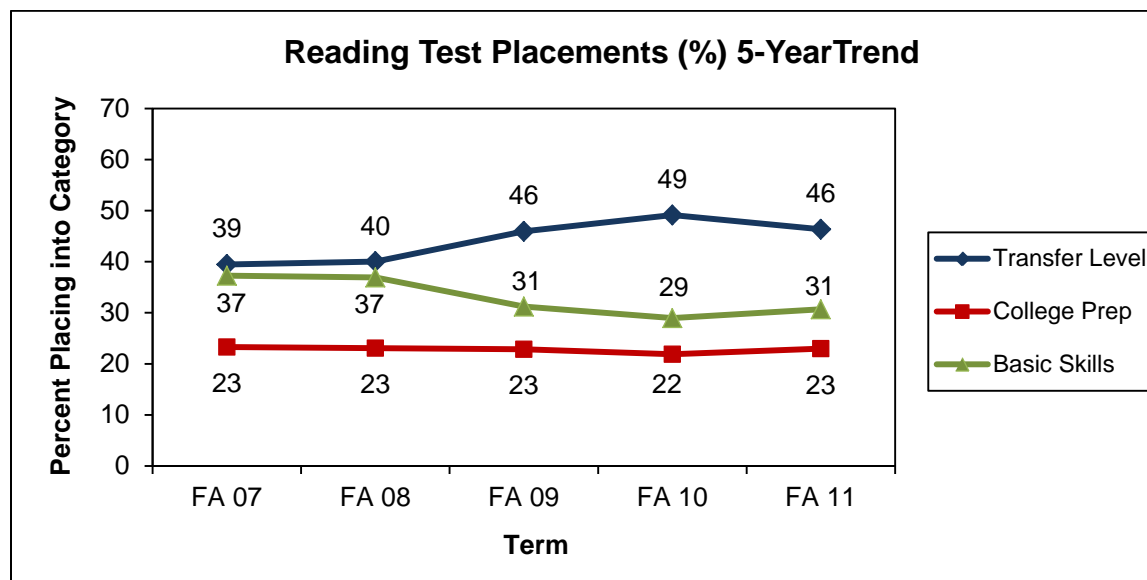
Placement Rates

Placements into reading courses were variable over the past 5 years. Placements into the transferable level (English 1A) decreased in 2011 by 3 percentage points to 46% following a steady 4-year increase. The 5-year average percentage of 17-18 year old students placing at the transfer level for the period was 44%.

College-preparatory placements have remained level over the last 5 years. The placement rate into college-prep courses (English 84 or 7) is 23%.

The percentage of basic skills placements decreased over the previous 4 years but increased slightly last year to 31%. This category consists of 2 basic skills courses (English 80 and English 82). About 3% of students placed at the English 80 level, down from 5% in 2007. The 5-year average placement rate into basic skills reading courses was about 33%.

Table 3: Reading Assessment Test Placement Rates

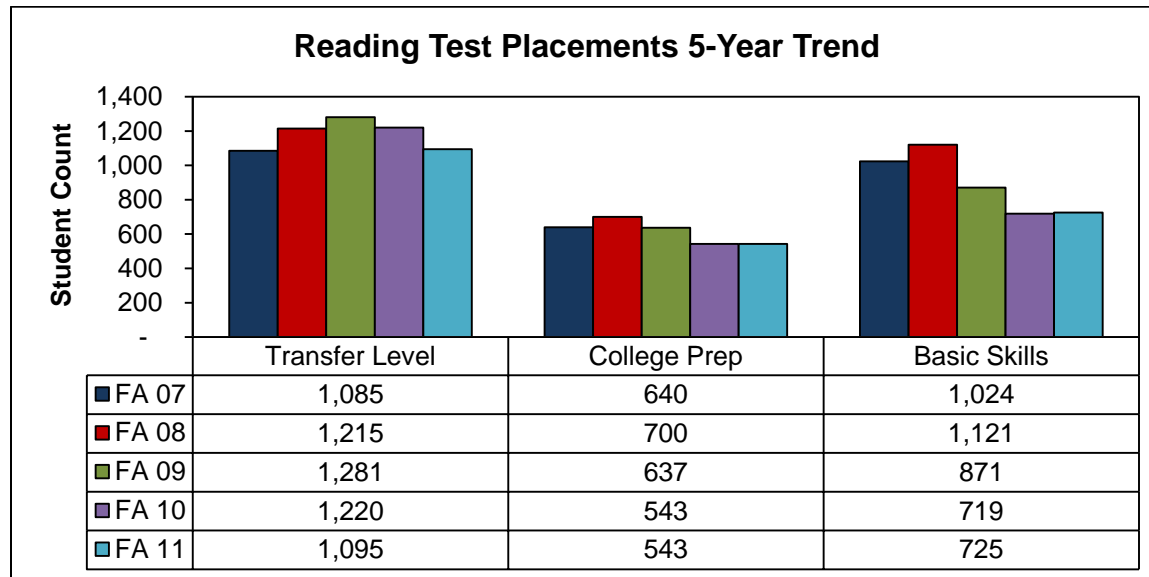


Placement Numbers

The decline in enrollment counts is reflected in the overall decreasing trend in placement numbers during the 5-year period. Transfer-level placement counts peaked in 2009 but have gradually declined thereafter. Placements decreased by 10% from last year, yielding a placement count of 1,095.

College prep and basic skills, however, remained more stagnant compared to the previous year. Placements for college prep remained constant at 543. Basic skills placements increased slightly to 725, a 1% increase from 2010.

Table 4: Reading Assessment Test Placement Numbers



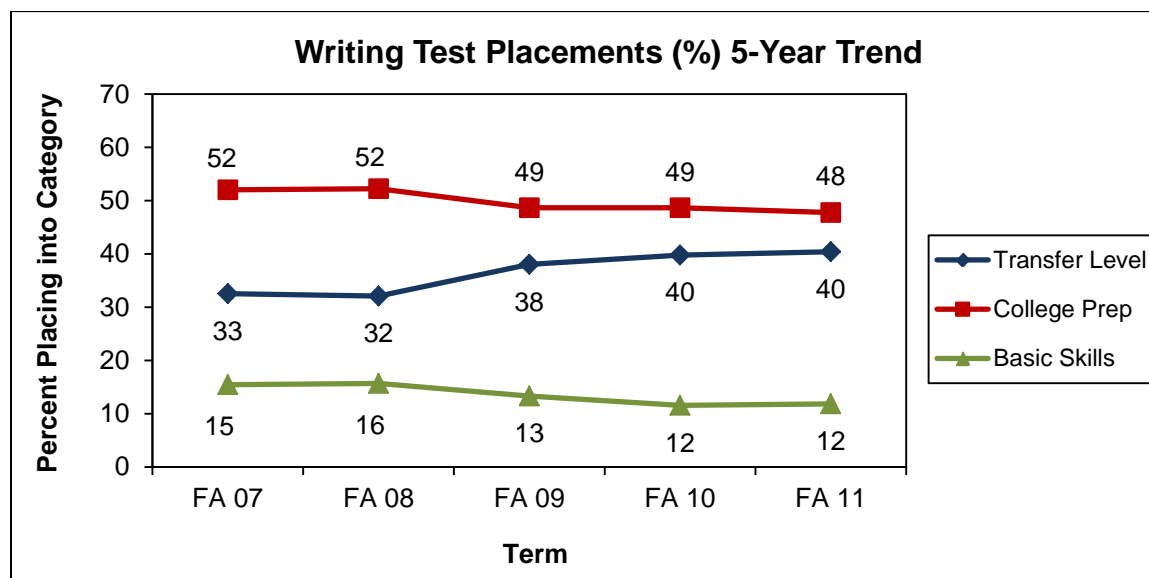
WRITING

Placement Rates

During the last 3 years, transfer-level (English 1A) course placements remained steady, yielding a placement rate of 40% in 2011. Placements into college prep (English A) and basic skills (English B) have also stabilized at 48% and 12%, respectively. Over the past 5 years, basic skills placements declined by nearly 4 points.

Five-year average placements into transfer-level, college-prep and basic skills writing courses were 36%, 50% and 14%, respectively.

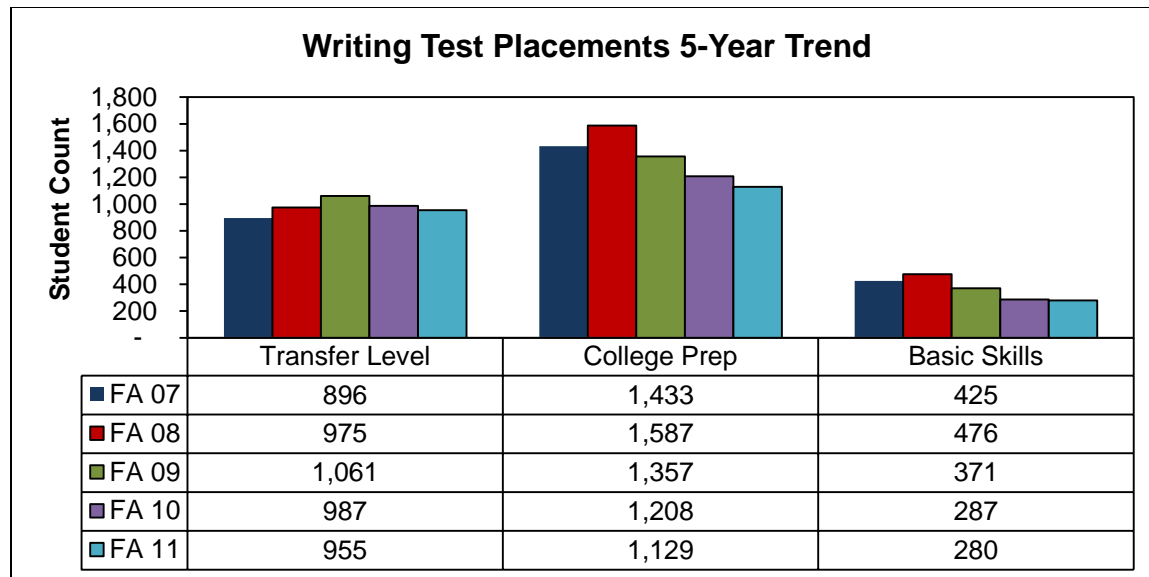
Table 5: Writing Assessment Test Placement Rates



Placement Numbers

Counts for assessment test results have gradually declined for all 3 course groups. Transfer-level and college-prep placements decreased slightly in 2011, yielding a placement count of 955 and 1,129, respectively. The number of placements into basic skills remained steady from the previous year at 280.

Table 6: Writing Assessment Test Placement Numbers



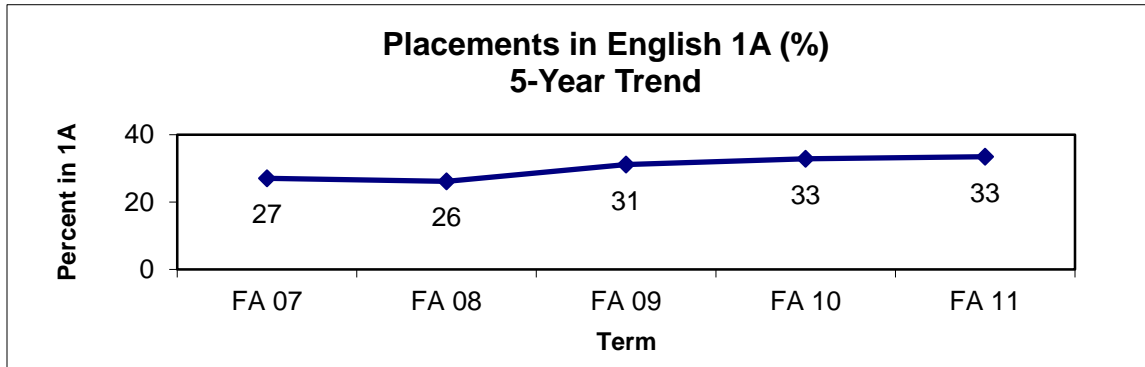
ENGLISH 1A

Placement Rates

To qualify for English 1A (transfer-level reading and writing), examinees must pass both the Reading and the Writing portions of the assessment test. The two tables above reflected placement rates into the transfer-level course (English 1A) based only on one of these two criteria in order to show academic preparation by subject. The table below reflects actual course placement rates using both the reading and writing qualifying test scores.

Placement rates have increased steadily within the last 3 years, following a slight decline in 2008. Rates peaked in 2011 at approximately 34%. The 5-year average rate was 30%.

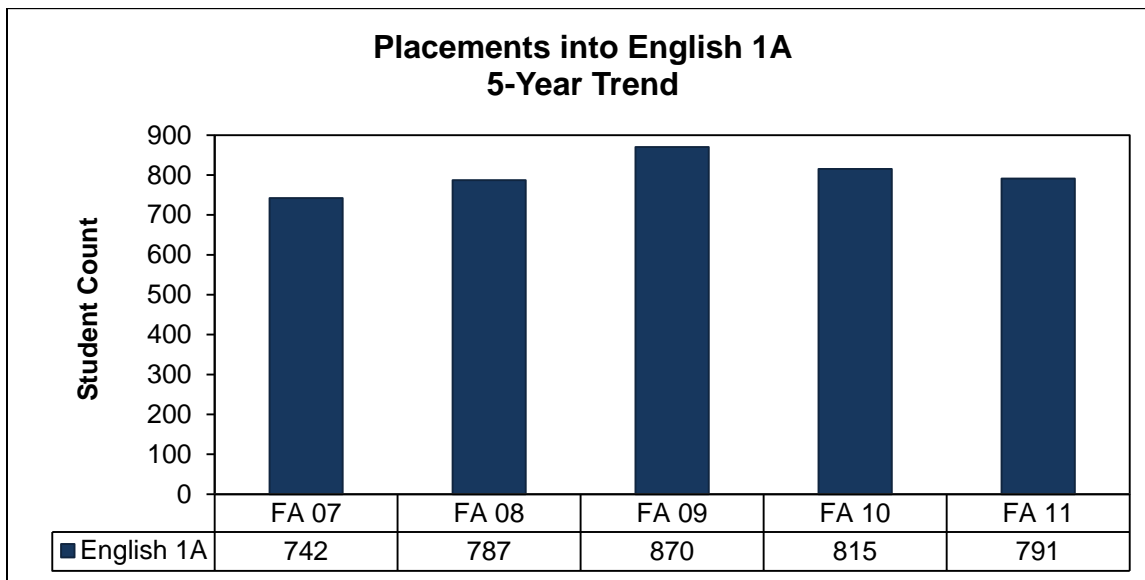
Table 7: English 1A Placement Rates



Placement Numbers

Though placement rates continue to increase, counts have decreased since reaching a 5-year peak in 2009. This may be attributed to the decline in student enrollment. In 2011, 791 students placed into English 1A.

Table 8: English 1A Placement Numbers

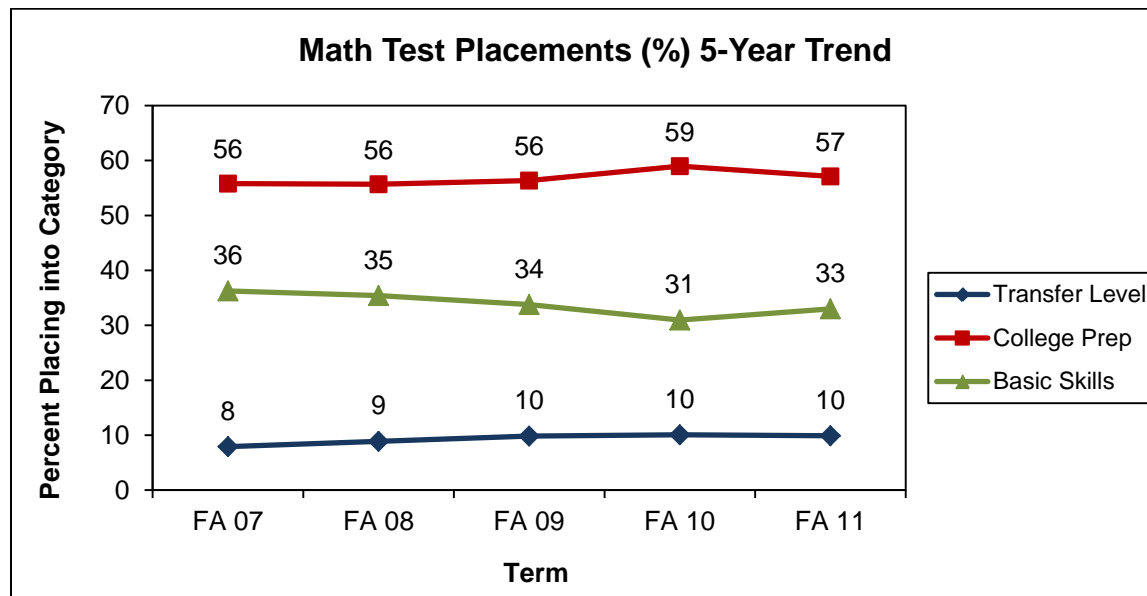


MATHEMATICS

Placement Rates

Placements into the transfer-level courses remained stable for the last 5 years. Average rates are approximately 9% (see Appendix for a complete list of these courses.). Rates for college prep and basic skills experienced a shift in patterns. College prep declined (and basic skills increased) by 2 points in 2011. Average placement rates into college-prep and basic skills math courses were 57% and 34%, respectively.

Table 9: Math Assessment Test Placement Rates

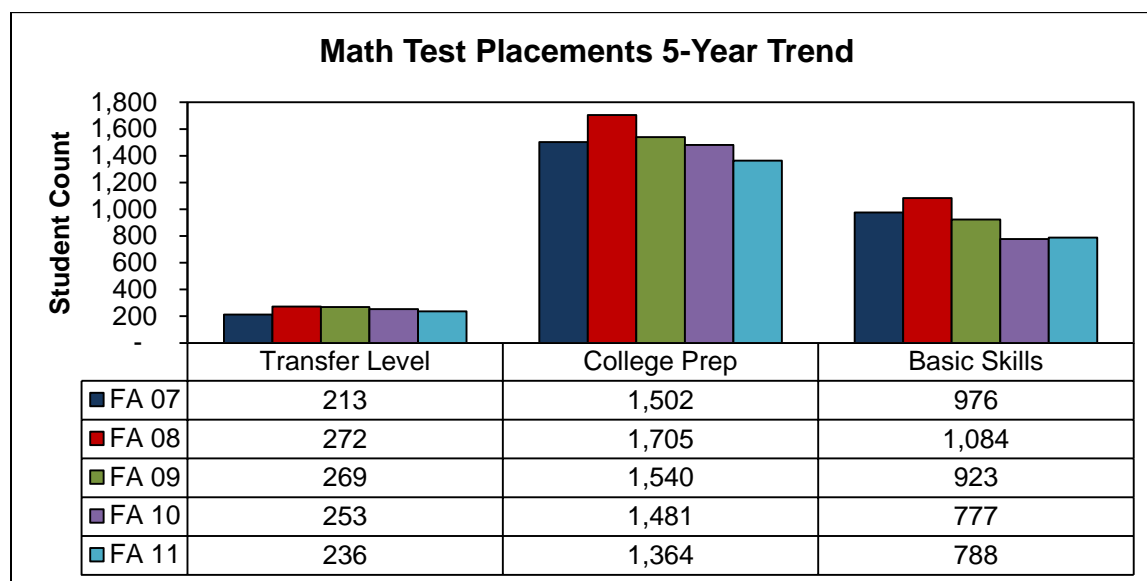


Placement Numbers

Of the 3 course groups, the fewest numbers of tested students placed into transfer-level math. Placements into this level have remained fairly level in the last several years, with 236 placements in 2011. The 5-year average count for transfer-level placements was 249.

Most students placed into the college-prep level, but this number has progressively decreased over the years, dropping to 1,364 by the end of the 5-year period. Basic skills placements remained consistent at 788. On average, 1,518 and 910 students placed into college prep and basic skills, respectively.

Table 10: Math Assessment Test Placement Numbers



Note: New cut scores affected some basic skills and college-prep courses beginning in Fall 2009.

CHEMISTRY

The Chemistry placement test is a paper and pencil test offered only one time to students. In other words, students cannot retake this test as with other placement tests. The test measures students' knowledge of basic chemistry, including laboratory skills and mathematics. Not all students are required to take this placement test. Only students interested in enrolling in Chemistry 1A (General Chemistry I) must take the Chemistry placement test, unless they successfully completed Chemistry 4 (Beginning Chemistry) in the past.

Results for the Chemistry placement tests are outlined in Table 3. In general, more students placed into the higher course, Chemistry 1A. However, an increasing rate of students placed into the lower level over the 5-year period. Average placement rates during this timeframe for Chemistry 4 and Chemistry 1A were 36% and 64%, respectively.

Table 11: Assessment Test Results by Chemistry Course

Chemistry Results	2007 (n=2,879)		2008 (n=3,215)		2009 (n=2,970)		2010 (n=2,629)		2011 (n=2,478)	
	N	%	N	%	N	%	N	%	N	%
Chemistry 4	5	20.8	13	36.1	12	36.4	13	39.4	12	48.0
Chemistry 1A	19	79.2	23	63.9	21	63.6	20	60.6	13	52.0
Total	24		36		33		33		25	

ENGLISH AS A SECOND LANGUAGE

The English as a Second Language (ESL) assessment consists of a computerized reading skills test, a questionnaire, an English writing sample, an oral interview, and an orientation to the College. The comprehensive ESL assessment places students into Listening/Speaking (Oral), Reading and Writing courses. These courses are listed by level in the Appendix. A 5-year trend of placement results is found in Table 4 below.

Similarly in previous years, a very small percentage of students aged 17-18 ($\leq 3\%$) took the ESL test in 2011. College-prep placements overall have increased in recent years. Oral placements have climbed steadily, increasing by 9 points from 2007 and peaking at 95% in 2011. In contrast, reading showed greater fluctuations but has remained steady since a decrease in 2009. Writing placements also wavered but reached a high of 88% following last year's decrease. During the 5-year period, younger students placing into basic skills ESL courses ranged from 5%-14% for oral, 15%-19% for reading and 12-27% for writing.

Table 12: Assessment Test Results by ESL Test Category and Course Group

ESL Section	2007 (n=2,879)		2008 (n=3,215)		2009 (n=2,970)		2010 (n=2,629)		2011 (n=2,478)	
	N	%	N	%	N	%	N	%	N	%
Oral										
College-prep	72	85.7	73	89.0	58	92.1	68	93.2	54	94.7
Basic Skills	12	14.3	9	11.0	5	7.9	5	6.8	3	5.3
Total	84		82		63		73		57	
Reading*										
Transfer-level	0	0.0	0	0.0	1	1.5	3	3.4	2	3.1
College-prep	67	80.7	72	84.7	52	80.0	69	78.4	51	79.7
Basic Skills	16	19.3	13	15.3	12	18.5	16	18.2	11	17.2
Total	83		85		65		88		64	
Writing*										
Transfer-level	0	0.0	0	0.0	1	1.5	3	3.8	2	3.3
College-prep	61	73.5	62	72.9	56	86.2	58	73.4	52	85.2
Basic Skills	22	26.5	23	27.1	8	12.3	18	22.8	7	11.5
Total	83		85		65		79		61	

*To place into transfer-level Reading and Writing, examinees must achieve a qualifying score on both the Reading and Writing portions of the assessment test (see page 12).

RETESTING PATTERNS

Examinees are permitted to repeat each of the computer-adaptive placement tests once if they are not satisfied with their placement and have not enrolled into nor completed any Reading, Writing or Math courses. Permission to take the placement test more than twice is granted by exception of the Dean.

Table 5 outlines the retesting patterns of students of all ages at both ECC and Compton Center. Between 12% and 19% of all examinees by subject elected to repeat a test in 2011. Less than 1% received special permission to take a test more than twice.

Table 13: Number of Students Re-taking Placement Tests by Subject

Test	Number of Students by Attempt						Total Tests (2011)	
	1		2		3 or more		N	%
	N	%	N	%	N	%		
Reading Comprehension	7,331	85.2	1,244	14.5	31	0.4	8,606	100.0
Sentence Skills	7,211	83.8	1,370	15.9	23	0.3	8,604	100.0
Arithmetic	5,595	87.9	743	11.7	27	0.4	6,365	100.0
Elementary Algebra	7,717	87.5	1,075	12.2	26	0.3	8,818	100.0
College-Level Math	1,691	80.6	387	18.5	19	0.9	2,097	100.0

Table 6 focuses on improvement in test scores between administrations. Because only a small percentage of examinees retake a placement test more than twice, score improvement was analyzed between only the first and second administration. For the 5 placement tests, the average test score increased by 6 to 8 points. Approximately 68% of students who took the Sentence Skills and College Math placement tests twice improved their test scores. Not far behind, nearly two-thirds of Reading Comprehension (64%), Arithmetic (64%), and Algebra (65%) test takers increased their scores.

Although improving one's score is a goal when retaking a placement test, the ultimate goal is placing into a higher level. For Reading Comprehension and Sentence Skills respectively, 38% and 34% of examinees improved their placements by 1 to 3 levels. Because the Math placement scores are intricately intertwined with each other, only an overall Math percentage of improvement is reported. For all Math subjects, 37% of examinees improved their placement by up to 3 placement levels. Retaking the placement tests, therefore, improved over a third of students' placements. Individual student preparation between tests is unknown at this time.

Table 14: Average Placement Scores and Percentage of Students Who Improved on the Second Administration

Test	Average Score per Test		% of Increased Scores	% of Improved Placements
	1	2		
Reading Comprehension	62.1	67.7	64.4	38.0
Sentence Skills	75.5	81.6	67.7	33.7
Arithmetic	38.1	45.8	64.2	37.0
Elementary Algebra	53.2	60.5	65.4	
College-Level Math	49.2	56.6	68.0	

CONCLUSION

Basic skills placement rates have steadily decreased over the years. The most recent year, however, showed an increase in basic skills Reading and Mathematics. These changes are accompanied by slight decreases in transfer-level placements. It is not clear why basic skills placements in Reading and Mathematics have increased.

This study provided a general analysis of the El Camino College student coming directly from high school (or shortly thereafter). This group tends to perform the best on average than any other age group, so older students tend to be less well prepared for college, on average, compared to students with a recent high school experience. For example, the average placement rates for all assessed students into basic skills reading, writing and math were 34%, 16% and 39%, respectively. In comparison, recent high school graduates placed into the same categories of basic skills at 33%, 14% and 34%, respectively.

Placement counts overall have decreased throughout the 5-year period. This is likely a result of student enrollment trends, which peaked in 2008-09 and progressively decreased thereafter.

APPENDIX – COURSES BY GROUP

READING & WRITING

Course Group	Levels Below Transfer	Reading	Writing
Transfer-level	--	<ul style="list-style-type: none"> English 1A – Reading & Composition 	<ul style="list-style-type: none"> English 1A – Reading & Composition
College-preparatory	1	<ul style="list-style-type: none"> English 84 (formerly Engl-2R) – Developmental Reading & Writing English 7 – Speed & Power Reading 	<ul style="list-style-type: none"> English A – Writing the College Essay
Basic Skills	2	<ul style="list-style-type: none"> English 82 (formerly Engl-R) – Introduction to Reading Skills 	<ul style="list-style-type: none"> English B – Introduction to the Composing Process
	3	<ul style="list-style-type: none"> English 80 – Basic Language Skills 	

MATHEMATICS

Course Group	Levels Below Transfer	Course
Transfer-level	--	<ul style="list-style-type: none"> Math 190 – Calculus Math 160 – Business Calculus Math 180 – Pre-Calculus Math 170 – Trigonometry Math 150 – Elem. Probability & Statistics Math 140 – Finite Math Math 130 – College Algebra Math 120 – Nature of Math Math 115 – Prob. & Stats for Elementary Teachers Math 110 & 111 – Math for Elem. Teachers Computer Science 1, 5, 10
	--	
	--	
College-preparatory	1	<ul style="list-style-type: none"> Math 80* – Intermediate Algebra for Science, Technology, Engineering, and Mathematics Math 73* – Intermediate Algebra for General Education Math 60 – Elementary Geometry
	2	<ul style="list-style-type: none"> Math 40 or 41B/43* – Elementary Algebra
Basic Skills	3	<ul style="list-style-type: none"> Math 41A – Elementary Algebra, Part I Math 33* – Extended Elementary Algebra, Part I Math 25 – Pre-Algebra Review Math 23 – Pre-Algebra
	4	<ul style="list-style-type: none"> Math 10A-10B/12 – Basic Arithmetic Skills

* Math 80 replaced Math 70 (Intermediate Algebra) in Fall 2009. It is a Calculus-track algebra course.

* Math 73 was inaugurated in Fall 2009. It is a non-Calculus track algebra course.

* Math 33 and 43 (Extended Elementary Algebra, Parts I and II) replaced Math 41A and 41B (Elementary Algebra, Parts I and II) in Fall 2009.

ENGLISH AS A SECOND LANGUAGE (ESL)

Course Group	Levels Below Transfer	Oral (Listening/ Speaking) *	Reading	Writing
Transfer-level	--		<ul style="list-style-type: none"> English 1A - Reading & Composition for Foreign Students 	<ul style="list-style-type: none"> English 1A - Reading & Composition for Foreign Students
College-preparatory	1	<ul style="list-style-type: none"> ESL 51C – (Advanced) ESL 51B – (Intermediate) 	<ul style="list-style-type: none"> ESL 52C – (Advanced) ESL 52B – (Intermediate) 	<ul style="list-style-type: none"> English A-X – Writing the College Essay ESL 53B – (Intermediate)
Basic Skills	2	<ul style="list-style-type: none"> ESL 51A – Intro to English Conversation 	<ul style="list-style-type: none"> ESL 52A – Intro to Reading and Vocab. Building 	<ul style="list-style-type: none"> ESL 53A – Elementary Grammar/Writing

* Although Listening/Speaking courses indicate “levels below transfer,” they do not directly lead to a transfer-level course such as English 1A.