

**El Camino College  
Assessment Test Results  
New Students from High School, Fall 2006 to Fall 2010**

This report displays course placement rates 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 about half of all examinees who enroll in fall.

Assessment tests are offered in 5 subjects at ECC: Chemistry, Mathematics, Reading, Writing 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. These test counts typically mirror fluctuations in college enrollment. The number of tests transitioned from a low point in 2006 to climb to a 5-year high in 2010, due to dramatic enrollment growth at both the Torrance campus and Compton Center. 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. Note that while individual test administrations rose, the number of unduplicated “students tested” (and students ultimately enrolling at ECC) declined, perhaps due to a reduction in related course sections.

Fall 2010 showed a continued rise in the rate of transfer-level and college-prep placements. This may be due to the increase in CSU/UC-prepared students who were diverted to El Camino College by enrollment constraints at our California universities.

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

Test	Subject	Number of Students Taking Each Test or Level *				
		2006	2007	2008	2009**	2010
Arithmetic	Math	4,671	5,629	6,326	6,593	6,883
Algebra	Math	6,621	7,707	8,684	9,242	9,635
College-level Math	Math	1,688	1,872	2,061	2,289	2,380
Reading Comprehension	Reading	6,514	7,706	8,506	9,219	9,489
Sentence Skills	Writing	6,516	7,703	8,491	9,196	9,481
Chemistry	Chemistry	88	88	113	98	92
English as a Second Language	ESL	586	374	575	259	547
<b>Total Tests (duplicated)</b>		<b>26,686</b>	<b>31,079</b>	<b>36,764</b>	<b>38,905</b>	<b>40,517</b>
<b>Students Tested (unduplicated)</b>		<b>8,162</b>	<b>9,556</b>	<b>10,532</b>	<b>11,196</b>	<b>11,164</b>
<b>Tested Students Enrolled in Fall</b>		<b>5,084</b>	<b>5,349</b>	<b>6,536</b>	<b>5,389</b>	<b>4,851</b>

\* 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 in Table 2 by number and percentage in each subject and course group. Charts tracking the placement percentages of each begin on page 3.

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

Test	2006 (n=2,800)		2007 (n=2,879)		2008 (n=3,215)		2009 (n=2,970)		2010 (n=2,629)	
	N	%	N	%	N	%	N	%	N	%
<b>Reading**</b>										
Transfer-level	979	36.5	1,085	39.5	1,215	40.0	1,281	45.9	1,220	49.2
College-prep	634	23.7	640	23.3	700	23.1	637	22.8	543	21.9
Basic Skills	1,066	39.8	1,024	37.2	1,121	36.9	871	31.2	719	29.0
<b>Total</b>	<b>2,679</b>		<b>2,749</b>		<b>3,036</b>		<b>2,789</b>		<b>2,482</b>	
<b>Writing**</b>										
Transfer-level	942	35.1	896	32.5	975	32.1	1,061	38.0	987	39.8
College-prep	1,279	47.7	1,433	52.0	1,587	52.2	1,357	48.7	1,208	48.7
Basic Skills	459	17.1	425	15.4	476	15.7	371	13.3	287	11.6
<b>Total</b>	<b>2,680</b>		<b>2,754</b>		<b>3,038</b>		<b>2,789</b>		<b>2,482</b>	
<b>Math</b>										
Transfer-level	235	8.9	213	7.9	272	8.9	269	9.8	253	10.1
College-prep	1,422	53.6	1,502	55.8	1,705	55.7	1,540	56.4	1,481	59.0
Basic Skills	997	37.6	976	36.3	1,084	35.4	923	33.8	777	30.9
<b>Total</b>	<b>2,654</b>		<b>2,691</b>		<b>3,061</b>		<b>2,732</b>		<b>2,511</b>	

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.

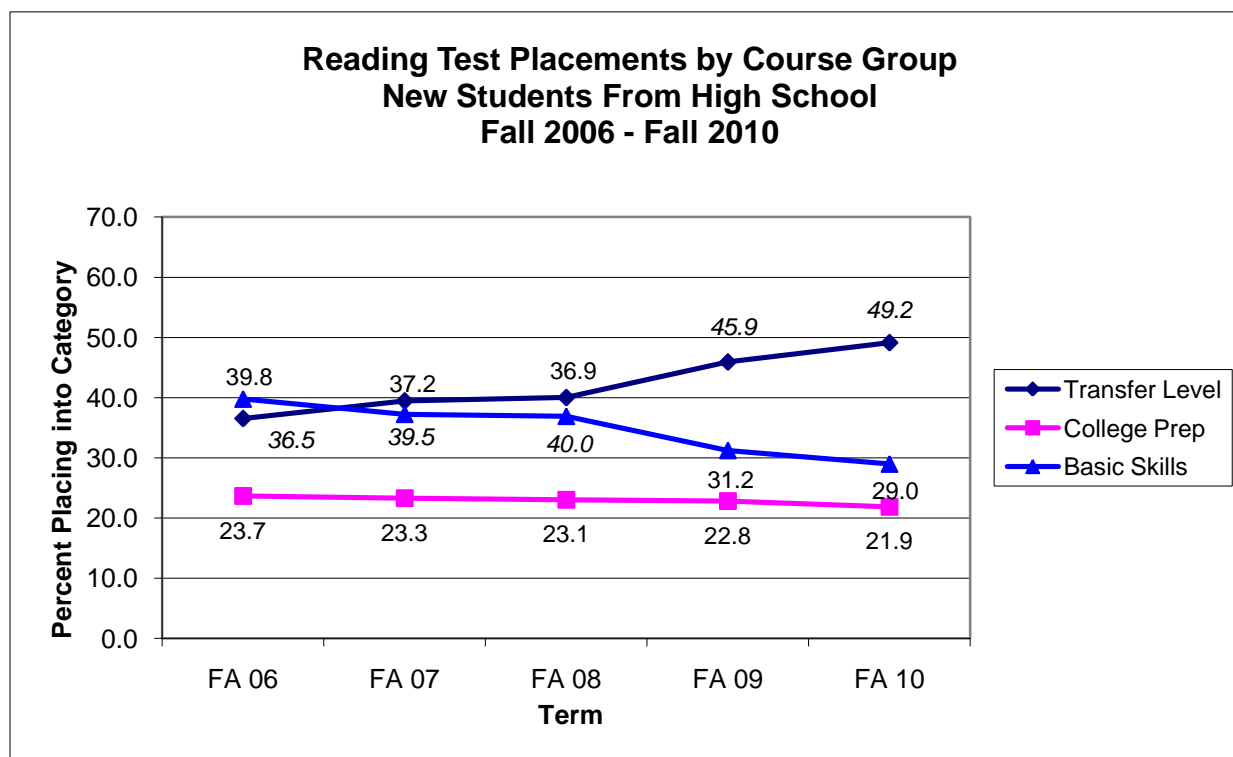
\*\* Transfer-level placements for Reading and Writing reflect only that portion of the test, and thus, general preparation in reading and writing only. To qualify for enrollment in English 1A, examinees must achieve a qualifying score on both the Reading and Writing portions of the assessment test (see page 4).

## Reading

Placements into reading courses were variable over the past 5 years. Placements into the transferable level (English 1A) have steadily increased in the past 2 years. Overall, 2010 placements increased by nearly 10% from 2006. The 5-year average percentage of 17-18 year old students placing at the transfer level for the period was 42%.

College preparatory placements have remained level for 3 years following a 2-year increase. The placement rate into college-prep courses (English 84 or 7) is about 22%.

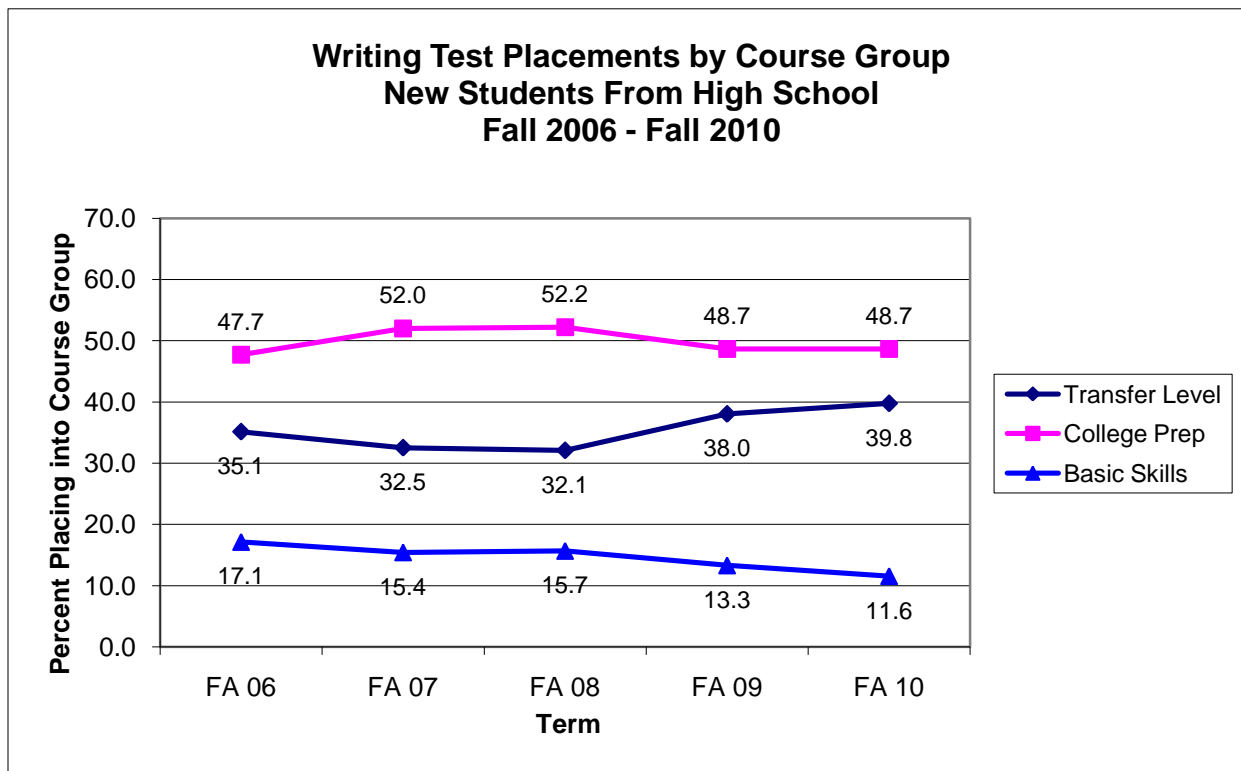
The percentage of basic skills placements have decreased over the past 2 years after a recent plateau. This decrease corresponds with the increase of students placing into the transferable level. Beginning in Fall 2007, this category now consists of 2 basic skills courses (English 82 and English 80). About 3% of students place at the English 80 level, down from 5% in the first year. No adjustment was made to the English 82 placement cut score. The 5-year average placement rate into basic skills reading courses was about 35%.



## Writing

Transfer-level (English 1A) course placements increased within the last two years, following a recent 2-year decline of nearly 3 percentage points. Placements into college-prep (English A) have also stabilized after a 5-point climb over three years. The placement rate into the basic skills course (English B) declined by 2 percentage points, contributing to the gradual decline in basic skills placements. Over the past 5 years, basic skills placements declined about 6 points.

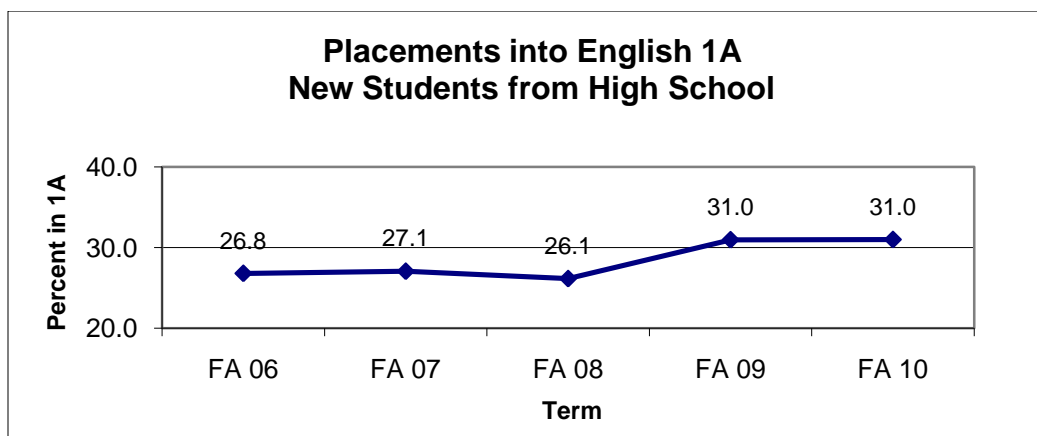
Five-year average placements into transfer-level, college-prep and basic skills writing courses were 35%, 50% and 15%, respectively.



## English 1A

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.

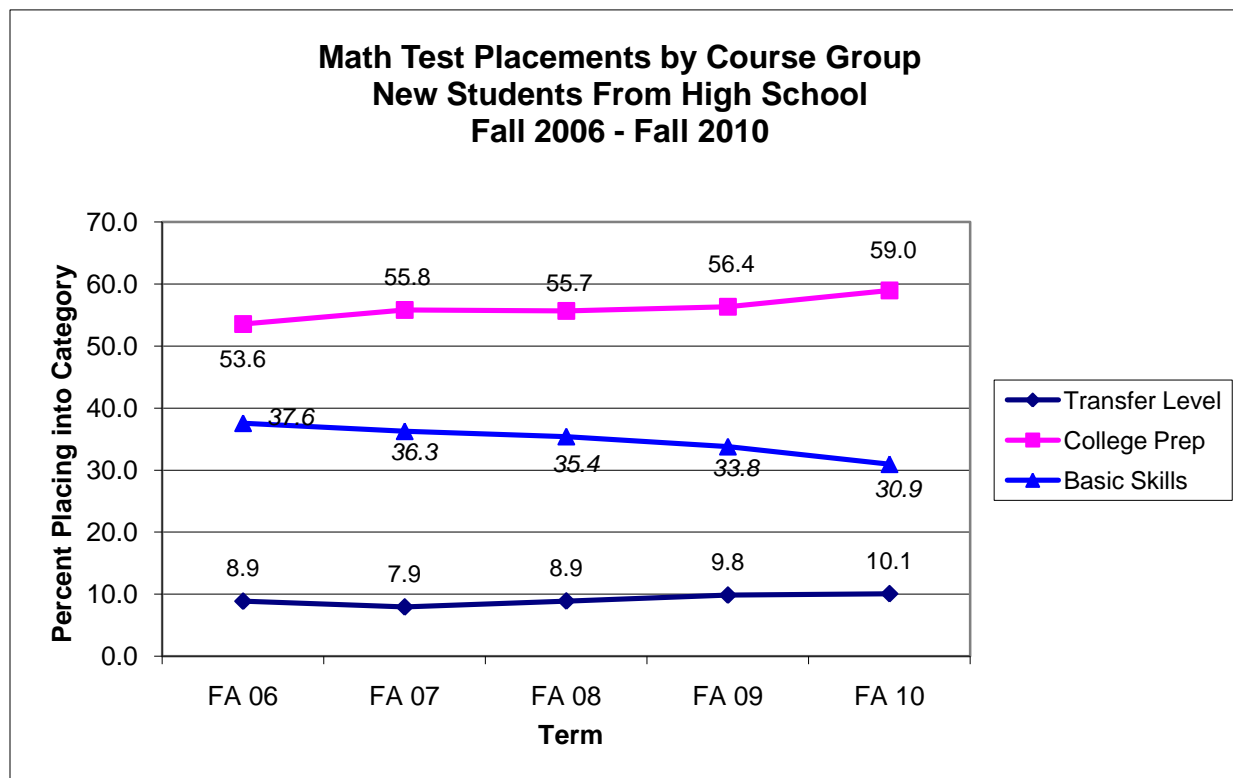
Placement rates fluctuated by as much as 4 percentage points over 5 years, with rates stabilizing over the past 2 year. The 5-year average was 28%.



## Mathematics

Placements into the transfer level courses remained stable for the last 5 years, but increased slightly in 2010. Average rates are around 9% (see Appendix for a complete list of these courses.).

Over the 5 years of the study, math experienced an overall increase in placements into the middle category, representing college-preparatory algebra and geometry with a corresponding decline in placements into basic skills courses (pre-algebra, arithmetic). College-prep placements climbed (and basic skills declined) over 5 points during the period. Average placement rates into college-prep and basic skills math courses were 56% and 35%, respectively.



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

## Chemistry Test Results

The Chemistry placement test is a written 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 place into the higher course, Chemistry 1A (61%-64%), although recent years show that placements are lower than in the high year of Fall 2007 (79%). Average percentage placement during this 5-year period for Chemistry 1A and Chemistry 4 were 65% and 35%, respectively.

**Table 3: Assessment Test Results by Chemistry Course**

Chemistry Results	EI Camino College Entering Fall Cohort									
	2006 (n=2,800)		2007 (n=2,879)		2008 (n=3,215)		2009 (n=2,970)		2010 (n=2,629)	
	N	%	N	%	N	%	N	%	N	%
Chemistry 1A	7	53.8	19	79.2	23	63.9	21	63.6	20	60.6
Chemistry 4	6	46.2	5	20.8	13	36.1	12	36.4	13	39.4
<b>Total</b>	<b>13</b>		<b>24</b>		<b>36</b>		<b>33</b>		<b>33</b>	

**English as a Second Language Test Results**

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. A very small percentage of students aged 17-18 (<=3%) take the ESL test.

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. In 2010, oral placements returned to a previous high of 93% with a low point found in 2007. In contrast, reading showed a 4-point increase in college-prep placements with a 5-year high of 85% in 2008. Writing placements declined over 5 years, especially following a high of 86% last year. In recent years, younger students placing into basic skills ESL courses range from 7%-14% for oral, 15%-26% for reading and 12-27% for writing.

**Table 4: Assessment Test Results by ESL Test Category and Course Group**

ESL Section	2006 (n=2,800)		2007 (n=2,879)		2008 (n=3,215)		2009* (n=2,970)		2010 (n=2,629)	
	N	%	N	%	N	%	N	%	N	%
<b>Oral</b>										
College-prep	58	93.5	72	85.7	73	89.0	58	92.1	68	93.2
Basic Skills	4	6.5	12	14.3	9	11.0	5	7.9	5	6.8
<b>Total</b>	<b>62</b>		<b>84</b>		<b>82</b>		<b>63</b>		<b>73</b>	
<b>Reading</b>										
College-prep	48	77.4	67	80.7	72	84.7	52	81.3	69	81.2
Basic Skills	14	22.6	16	19.3	13	15.3	12	18.8	16	18.8
<b>Total</b>	<b>62</b>		<b>83</b>		<b>85</b>		<b>64</b>		<b>85</b>	
<b>Writing</b>										
Transfer-level	1	1.6	0	0.0	0	0.0	1	1.5	4	5.0
College-prep	46	74.2	61	73.5	62	72.9	56	86.2	58	72.5
Basic Skills	15	24.2	22	26.5	23	27.1	8	12.3	18	22.5
<b>Total</b>	<b>62</b>		<b>83</b>		<b>85</b>		<b>65</b>		<b>80</b>	

## 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.

Between 9% and 14% of examinees by subject elected to repeat a test in 2010 (*at both locations*). One percent or fewer received special permission to take a test more than twice.

**Table 5: Number of Students Re-taking Placement Tests by Subject**

Test	Number of Students by Attempt						Total Tests (2010)	
	1		2		3 or more		N	%
	N	%	N	%	N	%		
Arithmetic	6,234	90.6	638	9.3	11	0.2	<b>6,883</b>	100.0
Algebra	8,590	89.2	1,026	10.6	19	0.2	<b>9,635</b>	100.0
College-level Math	2,016	84.7	339	14.2	25	1.1	<b>2,380</b>	100.0
Reading Comprehension	8,224	86.7	1,221	12.9	44	0.5	<b>9,489</b>	100.0
Sentence Skills	8,132	85.8	1,309	13.8	40	0.4	<b>9,481</b>	100.0

Because a small percentage of examinees retake a placement test more than twice, Table 6 focuses on improvement in test scores between only the first and second administration. For the five placement tests, the average test score increased by 6 to 8 points. Approximately 70% of students who took the Sentence Skills, Algebra and College Math placement tests twice improved their test scores. Not far behind, about two-thirds of Reading Comprehension and Arithmetic test takers increased their scores (67% and 62%, respectively).

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, 44% and 35% of examinees improved their placement by either 1 or 2 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, 46% of examinees improved their placement by 1, 2 or 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 6: 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	63.9	70.4	67.3	44.4
Sentence Skills	76.4	83.1	69.6	35.4
Arithmetic	38.6	45.0	62.0	46.1
Algebra	53.9	61.4	70.3	
College Math	51.0	59.0	70.4	

## Conclusion

The major finding from this study is that basic skills placement rates have lowered in Reading, Writing and Mathematics for the past 5 years. These changes are accompanied by increases in placements into transfer level courses in English and college-prep courses in Math.

It is not clear why basic skills placements are declining so dramatically. A possible reason is the recent enrollment restrictions at public 4-year institutions in California which may be diverting more of our community's better-prepared students to ECC. Our own recent cuts in course offerings may also favor the more-prepared college-ready student. Another factor affecting basic skills placements may be the implementation of the California High School Exit Examination (CAHSEE), which requires students to satisfy minimum standards in reading, writing and math. Beginning in 2006, students graduating from high school are required to achieve passing scores on the CAHSEE in order to receive a diploma (and thus qualify for financial aid in college<sup>1</sup>). Therefore, fewer high school graduates are eligible for financial aid than in the past and may be deterred from considering this option.

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.

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<sup>1</sup> Students may also pass the Ability to Benefit test to qualify for financial aid.



## Appendix – Courses by Group

### READING & WRITING

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

### MATHEMATICS

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

\* 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"> <li>English 1AX - Reading &amp; Composition for ESL</li> </ul>	<ul style="list-style-type: none"> <li>English 1AX - Reading &amp; Composition for ESL</li> </ul>
College-preparatory	1	<ul style="list-style-type: none"> <li>ESL 51C – (Advanced)</li> <li>ESL 51B – (Intermediate)</li> </ul>	<ul style="list-style-type: none"> <li>ESL 52C – (Advanced)</li> <li>ESL 52B – (Intermediate)</li> </ul>	<ul style="list-style-type: none"> <li>English A-X – Writing the College Essay</li> <li>ESL 53B – (Intermediate)</li> </ul>
Basic Skills	2	<ul style="list-style-type: none"> <li>ESL 51A – Intro to English Conversation</li> </ul>	<ul style="list-style-type: none"> <li>ESL 52A – Intro to Reading and Vocab. Building</li> </ul>	<ul style="list-style-type: none"> <li>ESL 53A – Elementary Grammar/Writing</li> </ul>

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