

De Anza College Office of Institutional Research and Planning

To: Jerry Rosenberg, PSME Dean

From: Mallory Newell, De Anza Researcher

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Subject: Math Early Assessment Program (EAP) Students - 2011 to 2015

All high school juniors are now required to take the EAP exam in the spring of their junior year as part of the Smarter Balanced test. The purpose of the exam is to inform students and parents of the student's readiness for college-level work. If a student is found to "Exceed the Standard" they are eligible for college-level math at any California State University (CSU) campus. The student does not need to take a placement test at the CSU or take any developmental courses.

If the student is "Conditionally Ready for CSU or participating CCC college-level math courses", the student must pass an approved math course with a C or better in their senior year. If they do not meet the conditional requirement, they will be required to participate in the CSU's Early Start Program, unless exemption was met through another pathway.

The California Community College Chancellor's Office has also approved the use of EAP scores in lieu of a placement test for students who meet the standard:

<http://extranet.cccco.edu/Portals/1/SSSP/Matriculation/Assessment/Clarification%20SAT%20ACT%207-1-2015.pdf>. The CCCO maintains a list of current community colleges who use the

EAP exam as an alternative to placement:

<http://extranet.cccco.edu/Divisions/StudentServices/EAP/AcceptingEAP.aspx>.

For this analysis, students who took the EAP exam in a Santa Clara County High School between spring 2011 and spring 2015 and either met the standard or conditionally met the standard in math were included. The analysis looks at the first math course the student enrolled in at De Anza and their success rate in that course. Currently, De Anza does not accept EAP scores for either English or Math, so all students in this analysis were required to take a placement test prior to enrolling in the math class, or show equivalency.

Recommendation:

- It appears that students who are eligible as well as conditionally eligible to enroll in college-level courses on their EAP exam will do well if placed directly into a college-level math course (i.e. Math114 or Math10) at De Anza College.
 - Since data shows that the likelihood of completing a college-level math course decreases at every subsequent level a student must complete, accepting students who are conditionally eligible into a college-level course would increase their likelihood of completing transfer-level math, thus increasing the overall completion rates in the math department, and help more student complete their educational goal.

Table 1. Number of Students who were Eligible or Conditionally Eligible for College Math

	Santa Clara High School Students Eligible for College Math	% of Santa Clara High School Students Eligible for College Math	Santa Clara High School Students Conditionally Eligible for College Math	% of Santa Clara High School Students Conditionally Eligible for College Math	Total Santa Clara High School Students Eligible/Conditionally Eligible for College Math
Spring 2011	1,823	43%	2,417	57%	4,240
Spring 2012	1,725	38%	2,838	62%	4,563
Spring 2013	1,837	39%	2,929	61%	4,766
Spring 2014	1,256	31%	2,733	69%	3,989
Spring 2015	1,608	57%	1,218	43%	2,826

Note: Enrollment was tracked between summer 2010 and spring 2016.

Table 1 displays the number of students who attended a Santa Clara County high school and were either eligible for college-level math in their junior year of high school or were conditionally eligible. For students who took the test in spring 2015, they would likely not enroll until fall 2016, though some students may attend sooner to take college-level courses. Fall 2016 was not included, as grades were not yet available.

- Overall, a higher percentage of students are conditionally eligible for college math than those that are eligible, 58% versus 42% on average.

Table 2. Enrollment in a Math Course at De Anza by EAP Status

	Eligible for College Math and Enrolled in a Math Course at DAC	% Eligible for College Math and Enrolled in a Math Course at DAC	Conditionally Eligible for College Math and Enrolled in a Math Course at DAC	% Conditionally Eligible for College Math and Enrolled in a Math Course at DAC	Total Eligible/Conditionally Eligible for College Math
Spring 2011	231	5%	431	10%	4,240
Spring 2012	192	4%	487	11%	4,563
Spring 2013	220	5%	498	10%	4,766
Spring 2014	133	3%	344	9%	3,989
Spring 2015	41	1%	2	0%	2,826

Note: Includes the first math course enrolled.

Table 2 displays the students who took the EAP exam in their junior year of high school at a Santa Clara County high school, and were either eligible to enroll or conditionally eligible to enroll in a college-level math course, and enrolled in a math course at De Anza.

- On average (excluding spring 2015 due to the small sample), 4% of eligible and 10% of those conditionally eligible in Santa Clara County enrolled in a math class at De Anza.

Table 3. Course Enrollment by EAP Status

Eligible			Conditionally Eligible		
	Students	Percent		Students	Percent
D010	188	23%	D114	514	29%
D001A	151	18%	D010	334	19%
D001C	115	14%	D041	289	16%
D041	75	9%	D212	227	13%
D001B	69	8%	D001A	89	5%
D114	39	5%	D001B	89	5%
D043	40	5%	D043	87	5%
D042	33	4%	D042	39	2%
D022	26	3%	D001C	21	1%
D002A	22	3%	D011	18	1%
D011	14	2%	D044	9	1%
D212	12	1%	D022	14	1%
D001D	10	1%	D210	14	1%
D002B	11	1%	D002A	4	0%
D044	3	0%	D001D	1	0%
D210	3	0%	D002B	1	0%
D012	1	0%	D012	1	0%
D046	1	0%	D046	2	0%
D049A	1	0%	D049A	1	0%
D051	1	0%	D049B	1	0%
D052	2	0%	D051	3	0%
Total	817	100%	D052	2	0%
			D217	2	0%
			Total	1,762	100%

Note: Includes the first math course enrolled.

Table 3 displays students who were required to take a placement test and their first math course enrolled at De Anza by their EAP status.

- Of the student who were eligible to enroll in a college-level math course, the top 5 courses in which they first enrolled were: Math10 (23%), Math1A (18%), Math1C (14%), Math41 (9%), and Math1B (8%).
 - Only 15 students placed into basic skills Math210 or Math212.

- Of the students who were conditionally eligible, the top five courses in which they first enrolled was Math114 (29%), Math10 (19%), Math41 (16%), Math212 (13%), and Math1A (5%).
 - Of this group, 14 placed into the lowest level basic skills course, Math210, and 227 placed into Math212, the basic skills course at two-levels below transfer level.
 - If De Anza were to accept student who are conditionally eligible into college-level math, the 227 students who placed into Math212 may be eligible to enroll in Math114 or Math10.

Table 4. Success Rates by EAP Status

	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Eligible	701	86%	65	8%	51	6%	817	100%
Conditionally Eligible	1,387	79%	256	15%	118	7%	1,761	100%
Total	2,088	81%	321	12%	169	7%	2,578	100%
All Math Courses	83,886	64%	27,509	21%	19,967	15%	131,362	100%

Note: Includes the first math course enrolled.

Table 4 displays the success rates in the first math course enrolled for all EAP students in the analysis by EAP status. Their rates are also compared to the overall Math success during the same time period.

- Students who were conditionally eligible exhibited a success rate in the first course enrolled over the time period of 79% compared to 86% for those that were eligible.
- This is compared to an overall success rate in all math courses in the same time period of 64%.

Table 5. Success Rates of Students who were Eligible and their Success Rates

	Eligible							
	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
D001A	130	86%	13	9%	8	5%	151	100%
D001B	50	72%	8	12%	11	16%	69	100%
D001C	102	89%	9	8%	4	3%	115	100%
D001D	10	100%					10	100%
D002A	21	95%			1	5%	22	100%
D002B	9	82%	1	9%	1	9%	11	100%
D010	171	91%	9	5%	8	4%	188	100%
D011	11	79%	1	7%	2	14%	14	100%
D012	1	100%					1	100%
D022	23	88%	2	8%	1	4%	26	100%
D041	56	75%	12	16%	7	9%	75	100%
D042	30	91%	2	6%	1	3%	33	100%
D043	34	85%	3	8%	3	8%	40	100%
D044	2	67%	1	33%			3	100%
D046	1	100%					1	100%
D049A	1	100%					1	100%
D051			1	100%			1	100%
D052	2	100%					2	100%
D114	34	87%	3	8%	2	5%	39	100%
D210	3	100%					3	100%
D212	10	83%			2	17%	12	100%
Total	701	86%	65	8%	51	6%	817	100%

Note: Includes only the first math course they enrolled in.

Table 5 displays the success rates of students who took the EAP and were eligible for college-level math.

- Based on the top 5 courses by enrollment, students who enrolled in Math1A exhibited a success rate of 86%, students in Math1B had a success rate of 72%, students in Math1C was 89%, students in Math10 was 91%, and students in Math41 was 75%.
 - Of the 12 students who placed into Math212, their success rate was 83% and all 3 of the students who placed into Math210 were successful.

Table 6. Success Rates of Students who were Conditionally Eligible and their Success Rates

	Conditionally Eligible							
	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
D001A	64	72%	16	18%	9	10%	89	100%
D001B	56	63%	22	25%	11	12%	89	100%
D001C	12	57%	5	24%	4	19%	21	100%
D001D	1	100%					1	100%
D002A	3	75%	1	25%			4	100%
D002B					1	100%	1	100%
D010	273	82%	37	11%	24	7%	334	100%
D011	15	83%	1	6%	2	11%	18	100%
D012	1	100%					1	100%
D022	3	21%	9	64%	2	14%	14	100%
D041	227	79%	38	13%	24	8%	289	100%
D042	33	85%	6	15%			39	100%
D043	46	53%	27	31%	14	16%	87	100%
D044	8	89%			1	11%	9	100%
D046	2	100%					2	100%
D049A	1	100%					1	100%
D049B	1	100%					1	100%
D051	3	100%					3	100%
D052	2	100%					2	100%
D114	416	81%	74	14%	23	4%	513	100%
D210	12	86%	2	14%			14	100%
D212	206	91%	18	8%	3	1%	227	100%
D217	2	100%					2	100%
Total	1,387	79%	256	15%	118	7%	1,761	100%

Table 6 displays the success rates of students who took the EAP and were conditionally eligible for college-level math.

- Of the top 5 courses by enrollment, students enrolled in Math1A exhibited a success rate of 72%, Math10 was 82%, Math41 was 79%, and students in Math114 was 81%.
 - The 227 students who placed into Math212 had a success rate of 91%, compared to the 2015-16 overall success rate of 58%. The high success rate of this group indicates they would likely be successful completing Math114 or Math10 as their first course.